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WM. R. STANSBU
Clerk

Supreme Court of the United States.

[redacted], October Term, 1921.

No. 238, October Term, 1922.

CONCRETE STEEL COMPANY,
Petitioner,

vs.

GEORGE E. VANDENBURGH,
Respondent.

IN EQUITY.

ON CERTIORARI TO THE CIRCUIT COURT OF APPEALS FOR THE SECOND CIRCUIT.

BRIEF FOR PETITIONER, CONCRETE STEEL COMPANY.

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ABSTRACT OF THE BRIEF.

The subject-matter is a patented ironwork for reinforcing concrete. It is not a reinforced concrete structure *per se*. See brief, page 2.

The letters-patent were reissued with broadened claims for a different invention, almost ten years after the original. All courts have held the new claims invalid. Page 51.

The Second Circuit held claims other than the new ones valid and infringed. It did not examine or discuss the prior art: the District Court held no infringement: the Circuit Court of Appeals reversed on that point alone. The Third Circuit held no infringement; its District Court held no validity and no infringement. The Sixth Circuit (D. C. and C. C. A.) held invalidity, and no infringement. The Second Circuit gave other claims the same scope as those declared void. Page 8.

Validity of the Letters-Patent.

The *original* letters-patent are invalid for direct anticipation, in view of the plaintiff's assertion that they disclose and cover "all forms of integral securing means for connecting the spacing bars to the spirals." (Transcript, page 52; Plaintiff's circular.) Many such are shown in the record. Page 39.

The original letters-patent are also void *in toto* for the want of invention. The prior struc-

tures, both in metal-working and in reinforced concrete, are substantially the same as plaintiff's; the differences are trivial; the contentions to the contrary are frivolous. It is "a common mechanical expedient." (C. C. A. 6th Circuit.) Page 39.

The plaintiff's structure has never been employed by anyone; he has sold none of it. The structures taken from the prior art have been used extensively. Plaintiff's sole proof of utility is certain licenses, bought as the price of peace. He is entitled to no indulgence from commercial success. He has done nothing to justify putting the art under tribute. Page 15.

Reissue Defenses.

The reissued letters-patent are void, because:—

The plaintiff had nothing to surrender;

the delay of ten years was too great;

the reissue is not for the same invention as the original;

the plaintiff was guilty of laches, as distinct from delay;

the oath to the reissue application was false;

the claims were unduly expanded to cover what defendant was doing;

the reissue re-asserts a claim (on which defendant has been held) which was cancelled as the price of allowance of the original;

plaintiff is estopped to assert a construction of the reissue which covers a collapsible reinforce. Page 49.

Infringement.

The structure of the original letters-patent (Transcript, page 45) is "rigid"; a beam or "truss"; a "collapsible" truss is impossible and ridiculous. Page 58.

Claim 3 of the original used the word "end," and was allowed after that word was substituted for "edge". There must be *two* "ends," at least; and they must be, as set out in the patent, arranged to make the structure "rigid". Page 27.

Defendant's structure is not "rigid"; it is collapsible. This was *defendant's* contribution, not plaintiff's. Stipulation, Transcript, page 125.

Collapsibility is not an "improvement," as asserted by the court below; it is a complete and radical departure from plaintiff's "rigid" idea. It is a different structure, operating in a different and *antagonistic* manner. Page 34.

Plaintiff's structure has counterpart "ends," disposed symmetrically about a center, giving rigidity. Defendant's structure is asymmetrical in construction, and has no "ends"or "center," in the sense of the patent. Page 87.

The proportions of plaintiff's coil render collapse impossible. Those of defendant make it inevitable. See samples; page 31.

Plaintiff did not invent "spirals" at all. "Column hooping" was forty years old. Page 39.

Reading the claims on defendant's structure "does not prove but only suggests infringement." Judge Hough, Transcript, page 135.

"Claims 5 (original 4) and 3 are in too general language. They go beyond the disclosure, exceed the invention and are false claims unless construed to mean by *retained* rigidly fixed in place, and (5) by kerfs disposed diagonally, kerfs inclined half one way and half the other." Judge Hough, Transcript, page 138. Italics judicial.

"I agree also with Judge Hough's conclusion that plaintiff's invention was not what he now claims and that what he now claims is not thereby disclosed." Judge Westenhaver. Appendix C, page 141.

Plaintiff's idea was a *bar*. He never conceived "column hooping." If his coils are "free of the bar" (Transcript, page 50, claims 1, 2, 4, 6) at one side, the addition of one or more spacers makes a structure different from his. Concrete could not be tamped in a *collapsible* hooping "free of the bar" at one side. Page 154.

ACCOUNTING.

Plaintiff proved only profits from sales of ironwork; he "made no attempt" to apportion between ironwork not made like the patented structure and that conforming to it; nor between plaintiff's rigid structure and defendant's collapsible one. He made no showing of the value contributed by the patent, under either head.

There was no proof of damages from lost sales or of reasonable royalty. Page 93.

COSTS.

Section 973, R. S. U. S., expressly prohibits the allowance made to the plaintiff in this case. Page 112.

LAW.

Page 102.

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Supreme Court of the United States.

No. 674, October Term, 1921.

No. 238, " " 1922.

CONCRETE STEEL COMPANY,
Petitioner,
v.
GEORGE E. VANDENBURGH,
Respondent.

In Equity.
On Certiorari to the Circuit Court of Appeals for the Second Circuit.

Brief for Petitioner, Concrete Steel Company.

Preliminary.

This is an ordinary patent suit upon a reissued instrument; before explaining how it gets into this Court, we state just what it is about, leaving the more detailed consideration of the art and the defenses to other sections of the brief.

The subject-matter, then, is the construction and assembling of the ironwork which is used to reinforce a concrete beam. We ask particular attention to the distinction between the "art of reinforcing concrete", and the construction and assembling of the ironwork which is used in reinforcing it; the two things are not the same, as will be at once apparent from a consideration of the only case which we have found on that subject in the reports of this court, namely,

Bone v. *Marion County,* 251 U. S., 134,

in which the opinion was written by Mr. Justice McKenna. That case did not concern the particular construction of a metal reinforcing; but did concern its assembly with the concrete, *per se;* whereas in the present case, when the metal structure is assembled as an integer, the work is done; it is then immaterial whether it is used for reinforcing concrete, or for any other purpose. This will become apparent in the progress of the case.

The plaintiff's ironwork has only two parts. One of these is a helix of heavy wire, miscalled* throughout the case a "spiral"; the other is a "spacer" or bar, for holding the turns of the helix in "spaced" relation. Both of these are old (admittedly), in many patents, in literature and in public use. E. g.,

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*The "spiral" is a plane curve; the helix or screw is three dimensional; Judge Hough, Transcript, page 134, with his usual accuracy, calls it a "cylindrical helix". It is sometimes elliptical in cross-section

The Helix,	and	The Spacer.
Considere, 752,523, page 66.		Do.
English, Hyatt, 1874, page 105.		Do.
German, 1892, page 108.		Do.

and others.

Plaintiff alleges novelty in the attachment between the helix and the spacer. His contention goes to the extravagant extent of asserting himself to be the first to devise what he calls an "integral" connection; that is, by some form of clip or hook struck up or otherwise formed from the metal of the spacer. This broad claim has been repudiated by all of the six courts which have dealt with it. Its absurdity is demonstrated by the German patent to Kieserling, page 108, Transcript, as well as others.

Driven to his last ditch, plaintiff then says that his form of attachment, made by biting out diagonal kerfs or slots in one edge of the spacer, leaving diagonal tongues which are hammered down after the turns of the helix are placed in the slots, was new and was an invention.

That, however, was mere ironworking, and is shown in the Norwood patent, page 59, in plaintiff's precise form, in a sand-screen, such as is in common use in preparing concrete. Many equivalent forms are shown in the record. The Circuit Court of Appeals for the Six Circuit has held plaintiff's patent to be devoid of invention on these references. See Appendix C to this brief, page 147. As an ironwork, regardless of its purpose or utility, it has no novelty.

The Court of Appeals (Sixth Circuit) was somewhat guided by its own prior decision in

Berger v. *Trussed Steel Concrete Co.*,
257 F. R., 741,

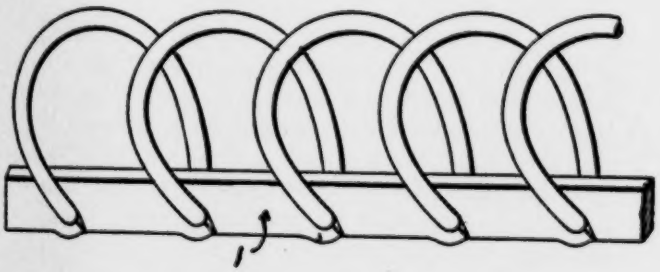
in which it pointed out how common it was to secure one metal part to another by a prong or tongue struck from one of them. We quote this decision in full, page 104 of this brief.

The decision below is based upon a superficial resemblance; that is, the resemblance between the fragmentary figure 4 of the plaintiff's patent, found on page 48 of the Transcript, (Reissue No. 14182), and something independently devised by the defendant in this case. We say this is a superficial resemblance, because the real disclosure of figure 4, as developed from the figure itself and from the statements in the specification, regarding it and other figures, is not used by the defendant; nor, as far as the record shows, by anyone else, nor has a single pound of it ever been made, used, or sold, anywhere by anybody. Plaintiff had every opportunity to prove the use of his structure, but has wholly failed to do so; the only proofs which he has given concerning its commercial availability have been of certain licenses issued at different times covering work *already done* (in an office building, for example), an injunction against which would have been disastrous; this under threat of litigation, the expense of which would have been greater in any event than the cost of the license fees exacted. We believe this has no weight in establishing

utility of the device or in showing that it has such a character as to merit the term "invention"; especially because there is no evidence of the character of any of the ironwork, the use of which was licensed by these contracts. So far as the record discloses, it may have not even a superficial resemblance to what is shown in the letters-patent. The licenses were the price of peace.

The thing which is shown in Figure 4 of the letters-patent in suit is here reproduced exactly.

Fig. 4.



The Court will note that this is fragmentary, and does not purport to represent any unitary structure embodying the disclosure of the patent. The end of the spacing bar marked 1 is broken away, to indicate in the conventional manner of the draftsman that the figure is *incomplete.*

But as shown in the drawings and described in the specification (presently to be quoted), the *complete* Figure 4 would be as follows:

Fig. 4 COMPLETED.

The specification says:

> "Fig. 3 is a detail perspective of the primary and secondary coils shown in Figure 1. Fig. 4 is a similar view of a modified form using one coil."

That is, Figure 4 when completed is, a detail perspective *like the ironwork shown in Figure* 1, except that there is a single coil instead of the two coils forming the preferred form (Figure 1) of the plaintiff's invention. It is not asserted that the defendant makes anything like this.

Further, plaintiff's patent states, page 1, line 80, page 49, Transcript—

> "As a preferred means of securing the coils to the bars I have shown a series of kerfs 8 in one face of the bar inclined to *slant from the center of the bar towards the opposite ends* thereof, and the coils are seated within these kerfs" etc.

The fragmentary Figure 4 of the patent has no "center", being incomplete; and it cannot

show this disposition of the kerfs. But the complete form does show it. As one of the claims held by the Circuit Court of Appeals to be infringed embraces this peculiar disposition of the kerfs, which defendant does not use (as we will point out when we deal with infringement), it becomes important.

Furthermore; this peculiar disposition of the kerfs is a necessary element of the patentee's structure, because it was the plaintiff's idea that the coils, as shown in Figure 1, should *slant away from the center,* so as to oppose one another and bring the strain upon them in opposite directions when the beam tended to bend under vertical stress, making it *rigid.*

As pointed out in our brief more fully, page 27, *this was the idea which the Examiner held to be patentable;* and from it he refused to allow the plaintiff to depart. The structure shown in the original letters-patent with its description (which is identical with that of the reissue); the discussions between the Examiner and the plaintiff as disclosed in the file-wrapper, Transcript, page 115; the limitations insisted upon by the Examiner; the terms of the claims allowed; all show this.

All of this was thrown in the fire when the application for reissue was filed, for the purpose of broadening the claims, nearly *two years* after the original patent issued, and after the defendant had acquired intervening rights; see page 68 of this brief.

If the Court shall be of the opinion that this is what the plaintiff "invented," then whether the patent be sustained or held invalid, it must

he held that the defendant does not make, use, or sell it; and the public does not. With the scope which plaintiff insists his patent should have (to cover *any form* of integral fastening between the spacer-bar and the coils) the claims are so absolutely invalid as to be beyond discussion; as indeed all courts have held as to the new claims 1 and 2 of the reissue.

But Judge Geiger, in

> *Johnson* v. *Browning, King & Co.*, 277 F. R., 315 (330)

has well expressed the rule of law in this language:

> "In any event, upon the issue of infringement, claims 2 and 3 should not, by construction, be given a breadth practically coincident with claim 1, or disallowed claims 2 or 5."

That is what the Circuit Court of Appeals has done in this case.

Why The Case Comes Here.

The Court will probably remember the circumstances under which the *certiorari* was allowed in this case. (Italics throughout this brief are ours, unless otherwise stated.)

The plaintiff, Vandenburgh, had patent No. 841,741, issued January 22, 1907, for a means of reinforcing concreate construction; applicable, as

petitioner believes, to *beams,* but not to what is now termed "column-hooping". Page 45 of the Transcript.

Certain correspondence with the defendant, petitioner in this case, was had which was stipulated into the record and begins on page 127, being Defendant's Exhibit D; in this the claim of infringement of this *original* letters-patent was set up and was repudiated on the ground that the plaintiff's original letters-patent disclosed and claimed *only a rigid construction,* while what the petitioner made was collapsible.

Apparently, plaintiff *acquiesced* in that interpretation of his original letters-patent. It is the petitioner's contention that his acquiescence is an estoppel to assert any different view now. At any rate, the threatened suit was not brought. The correspondence was in the summer of 1916, some nine years after the issue of the patent.

As a consequence of this correspondence, which terminated in June, 1916, the plaintiff hastily prepared a reissue application, which was filed July 1, 1916, and is found at page 48 of the Transcript; within six weeks, on August 15th, his letters-patent were reissued, with claims which it is asserted read directly upon the petitioner's construction. We here relate only the sequence of events.

In January of 1917, plaintiff wrote again to the petitioner; the letter is found on page 131 of the Transcript, endeavors to negotiate a license, and impliedly threatens to sue. No attention was paid to this letter and the bill of complaint was then filed.

The District Court, Judge Hough presiding, dismissed the bill for the want of infringement. The opinion is found on page 134 of the Transcript. *Only a cursory reference to the prior art was made,* as the Court thought the case so plain that none was needed. *Defendant has never had its day in court on the validity of either the original or the reissued letters-patent.*

The Circuit Court of Appeals, page 150, Transcript, reversed Judge Hough's decision of non-infringement, and held (with no discussion whatever of the defenses) that the patent was valid and infringed. As expressed by another Court in considering this opinion (Judge Westenhaver, Appendix C, p. 131), the Court seemed to consider that Judge Hough had considered the prior art and held the patent to be valid; which is not the fact.

The case then went to a Master, whose report is found on page 314 of the Transcript; he awarded a judgment which amounts to about eighteen thousand dollars. Exceptions were taken and the District Court, Judge Knox presiding, confirmed the report of the Master, page 345 of the Transcript. The Circuit Court of Appeals, speaking by Judge Mayer, affirmed the decree below; erroneously, we are sure. Page 398, Transcript.

Judge Mayer naturally and correctly thought that he could not go behind the former opinion of the Court, which settled the law so far as the case was then concerned. Immediate application for *certiorari* was made, and the plaintiff has very properly preserved the *status quo,* pending the decision of this Court.

Other Suits.

In the meantime, the plaintiff had brought two other suits, one of which was against the Electric Welding Company in the Third Circuit. In that case, Judge Orr, who is very experienced in this concrete art, decided that the patent was invalid and also was not infringed; not reported: Appendix C to this brief, page 119. The Circuit Court of Appeals, speaking by Judge Buffington, said that he "made no error in dismissing the bill," holding that the construction of the Electric Welding Company was not an infringement "assuming" that the patent showed invention: 263 F. R., 95, Appendix C, page 126. It is our thought that this invalidates the patent in the Third Circuit, as Judge Orr's opinion is now the law there.

The third litigation was against the Truscon Steel Company in the Sixth Circuit. In that case, Judge Westenhaver in the District Court said that while he might evade the issue of validity by holding that the defendant's structure did not infringe (the differences between it and the patent being as great as those referred to in the *Electric Welding case*), he would not do so; he considered the prior art very fully and held that the patent was void for the want of invention; not reported: Appendix C, page 119. It should be noted that what he held to be without invention was *not the particular language* which described the plaintiff's structure, but the *construction.*

The Sixth Circuit Court of Appeals also refused to base its decision on infringement; on an

independent review of the art it affirmed Judge Westenhaver's decision that the structure of the plaintiff was without invention; or, as expressed there was "a common mechanical expedient." 277 F. R., 345, Appendix C, page 142. Vandenburgh filed an application for the writ of *certiorari*, which your Honors have granted.

Also a petition was filed in the Court of Claims, upon which so far no important steps have been taken. Appendix F to our petition for *certiorari*.

The United States, by the Solicitor-General, have filed as *amicus curiae* a representation to the Court, asking that if the writ be granted in our case they might be permitted to show the interest of the Government in the decision. As this action was criticized in the reply brief of the respondent, we may add that the request went no further at that time; it was obviously proper, in view of the fact that if the patent should be sustained the United States were liable for a large recovery.

It is requested that, as there are questions in common, the two cases may be assigned for hearing at the same time. There are sufficient differences between them to raise some different questions, so that they cannot be properly consolidated, as we believe; but of course both cases raise the question of validity, and if that be decided adversely in the one case, it will control in the other, since the records are, while not identical, substantially so.

THE DEFENSES.

I. The reissued letters-patent are void.

A. Because the original letters-patent were without invention, in view of the prior art;

B. Because the reissue was applied for nine years and six months after the original had left the Patent Office, without explanation of the delay;

C. Because the oath accompanying the reissued application was perjurious, in that it stated that the reissue had been applied for "as soon" as the alleged errors were discovered, which the inventor has admitted, under oath, was not true.

D. Because the reissue was illegally broadened to cover matter not disclosed in the original, and is therefore not for the same invention.

II. The defendant, petitioner in this case, does not infringe either the original or the reissued letters-patent.

A. Because the specifications of both the original and reissued letters-patent show that Vandenburgh's idea was one of rigidity only, a two-way "truss"-like structure;

whereas defendant makes a one-way collapsible structure; of which Vandenburgh had no conception.

B. Because the inventor is estopped to contend that his original letters-patent covered a collapsible structure, in view of the denial by defendant, petitioner here, of infringement of the original letters-patent, and the reissue with expanded claims "to catch manufacturers like defendant"; (Judge Hough, page 138, Transcript, top).

C. Because defendant's structure does not respond to the terms of the claims, as construed and defined by the Circuit Court of Appeals.

III. Assuming that all of these defences, any one of which we believe sufficient, are found against us; nevertheless the master, the District Court and the Circuit Court of Appeals fell into grave error in stating the account in holding.

A. That there was no standard of comparison set up;

B. That the burden was on the defendant to prove anything at all in the accounting;

C. That the collapsibility of the structure did not affect the sales;

D. That anything was due the plaintiff;

E. That the plaintiff had made any impression on the art by which he was entitled to claim either royalty or profits from the use of his invention.

If the Court shall be of opinion, as we think it should be, that the plaintiff has made no invention in view of the prior art, all of the latter parts of our brief (after page 46) will be unnecessary and need not be read.

As it is an important consideration to know *just what effect the alleged invention has had upon the practice of manufacturers or users,* we here state what the record shows and what the Courts have said regarding Vandenburgh's position in the commercial art.

Vandenburgh's Position in the Commercial Art.

Judge Hough, District Court—Record, page 135:—

"Nor, on the other hand, shall I spend time in dwelling on the 'paper' nature of this patent. The style of strengthener for concrete now called infringing has been in growing use since 1907,

but there is no proof at all that plaintiff has contributed to that growth,

unless one is to believe that the mechanical world was moved by Fig. 4, the only portion of the disclosure suggesting even now defendant's device."

Judge Orr, District Court—Appendix C, page 124:

> "There is *no suggestion throughout the record* that the bar of the plaintiff has met any predetermined engineering demands in concrete construction."

Judge Westenhaver, District Court—Appendix C, Page 140:

> "The evidence shows that commercially he (plaintiff) has *contributed nothing whatever* to the progress of reinforced concrete construction. *No buildings or columns were ever constructed by anyone under his patent* prior to 1916. Two licenses only have been issued by him, the first in the latter part of 1916, under which no business appears to have been done except *perhaps* to put up one structure, and the other followed the favorable decision in the Second Circuit."

(The learned judge did not know it, but Judge Orr's decision terminated that license; or more accurately, left *in the licensee* the exclusive right for all the United States save the Pacific Coast, without royalty or accountability: see Johnson [Corrugated Bar Company's] license, page 259, record.)

C. C. A., Second Circuit, this case—Record, page 151, bottom:—

> "The defendant's witness Cummings frankly admits that this form of reinforcing structure *was new in cement work* and has come into general use."

(This gravely erroneous statement was all the Court said. Mr. Cummings, however,

A. Was *not* defendant's witness.

B. Was not speaking of the patent in suit at all.

C. Did *not* make the so-called "admission" stated, either in terms or effect.

D. Was speaking of *his own structure*, which his Circuit Court of Appeals held did not infringe. 263 F. R., 95. Appendix C, page 129.

E. Had no power to "admit" the voluminous prior art out of the case.

F. The record shows the contrary.

What Mr. Cummings *did say* [Record, p. 26, Q11 *et sequitur;* see page 36, this brief] bears no resemblance to the Court's statement. He did not *so much as mention* Mr. Vandenburgh, his structure, or his original or his reissued letters-patent, in any part of his deposition appearing in this record.)

C. C. A., Third Circuit—Appendix C, page 128, 263 F. R., 95,

> "In the nine years between its grant and the filing of this bill, Vandenburgh's patent *made no impress in this art.*"

C. C. A., Sixth Circuit—277 F. R., 345. Appendix C, page 149:

> "We are not impressed that the advance in reinforced concrete is due in any substantial measure to Vandenburgh's contribution."

Scope of Claims.

The first thing which the Court must determine is the scope which is to be accorded to the claims of the letters-patent in suit in view of its position in the commercial art. If that scope is narrow and restricted, the range of prior art applicable thereto must be quite specific in order to meet the claims. On the other hand, if a broad interpretation is to be put upon them, then a much wider range of art is available for reference. In this case, we are content to take the plaintiff's own interpretation of his patent upon the issue of validity, and therefore we consider its scope, *as assigned by him;* premising that letters-patent cannot be given narrow scope for *validity,* and broad scope for *infringement.*

The plaintiff assigns the broadest possible scope to his patent, and of course must be bound by his contention in that behalf. That is to say, if the claims are to be so broadly construed as to cover what he says they cover, then any reference showing anything coming within the broad scope assigned is sufficient to invalidate his patent. We make no distinction here between the original and the reissue.

We are not left in the dark as to what he asserts his claim to be, outside of the language of the patent itself; because he has furnished as his Exhibit No. 7, page 52 of the Transcript, a circular which was scattered broadcast throughout the trade, giving his interpretation; a copy of which was received by the defendant, pe-

titioner in this case. One of the statements therein is this:

> "INTERLOCK SPIRALS can only be used where they bear the proper license tags under patent No. 841,741, Jan. 22, 1907, and reissue patent No. 14,182, Aug. 15, 1916; BASIC U. S. PATENTS *on all forms of integral securing means* for connecting the spacing bars to the spirals. *All* others are infringements and notice is hereby given to all users and manufacturers to discontinue the manufacture, use and sale of such bars immediately".

Of course there is no "patent No. 841,741", after its surrender.

That is plaintiff's own interpretation of what he had invented. Therefore, if there was in the art *any* form of "integral securing means", the patent must be held invalid; and no detailed language can save it, because the plaintiff's own representation estops him to contend that his invention lay in some specific and particular aspect of the assemblage of different elements. It is not enough, therefore, to save the patent to show (though that has not been shown) that although each of the individual elements of which it was composed was old in itself, nevertheless the combination of them was new, and therefore deserved the name of invention. No such claim has been set forth to the trade; but on the contrary, the whole gist of the patent has been asserted to be, as we see, "*all forms* of integral securing means". If it is integral, and if it secures the wire to the spacer, it infringes, according to plaintiff.

How unfounded any such contention is must be manifest from this record. See page 39 this brief, "PRIOR ART". As long ago as 1892, the German patent to Kieserling shows a form of "integral securing means", the very form adopted by the Truscon Steel Company, defendant in the suit in the Sixth Circuit, also now before this Court; which the plaintiff there had the temerity to assert was *the same as his invention.* It *is* the same as his invention. He himself has said it. But it immediately destroys any pretense of novelty in the alleged combination set out, and plaintiff is estopped by his own representation to contend that there is any patentable distinction between the Kieserling structure and his own.

There is this *unpatentable* difference between them; Kieserling uses square notches in the edge of his spacer G, in which the helix is wound; whereas the plaintiff uses, as far as his drawings are intelligible, a diagonal notch or kerf, leaving a spur. The difference is clearly not patentable, in view of the references which show the identical form of spur used by the plaintiff (see Norwood, page 57, or Drawing No. 8, or Eason, page 63, or Drawing No. 10, and many others); and the peening of the square notch is so common an expedient in metal working as to make any assertion of "novelty" in that respect ridiculous, as the Sixth Circuit in effect holds; not only a "mechanical expedient"; a "common mechanical expedient". 277 F. R., 348. See, for instance, Prescott and Bennett, page 55, or Drawing No. 7, hereafter described.

Under these conditions, we accept the assertion of plaintiff that his patent aims to cover "*all forms* of integral connection" between the spacer and the helix. He cannot complain of that, since we only take him at his word.

But also we must accept the line of cases which holds that "what would infringe if later would anticipate if earlier", of which

Peters v. *Active Manufacturing Company,* 129 U. S., 530;

and

Knapp v. *Morse,* 150 U. S., 221;

are examples. There are many others.

Therefore, inevitably and "rigorously", as the mathematicians say:

If the device of the Truscon Company infringes, as plaintiff says (and it is plainly a "form of integral connection") then the device of Kieserling—which is just as plainly identical with it—is an anticipation, direct and positive. No invention is present, in any event.

Real Disclosure of Patent.

This must be ascertained from the specification and drawings, and cannot be found from

any statement of counsel, or by interpretation of a witness.

Now, it is evident from the text and drawings that he was after a *beam, bar or truss*", which is inherently and necessarily *a stiff structure.* The whole idea of a beam or "truss" (the patentee's word) is of a horizontal structure to span an opening. Inherently such a structure *must* be stiff or *rigid.* Flexibility, or "collapsibility", is out of the question. It is true that it might be made reasonably stiff by the concrete if the ironwork were collapsible; but that was not the inventor's idea. That is, by stipulation, *defendant's* idea, exclusively; as a "natural and obvious" matter; page 133, Transcript. Throughout, Mr. Vandenburgh is *speaking in terms of a rigid structure;* and so far from its being an "inadvertence" in his original letters-patent is it for claims 1 and 2 to speak of a "spiral coil *rigidly* secured", that it was the *correct* expression of the inventor's idea, and no other is; the beam was horizontal, and was intended to be *stiff*, irrespective of the concrete which it reinforced.

We assemble here the statements in the specification of the reissued letters-patent, found on page 48 of the Transcript; Page 1, line 16:

> "The invention has for an object to provide a reinforcing bar with one or more spirally disposed coils secured to the bar so as to provide an extended area of contact adapted to resist strain longitudinally and laterally of the bar and *to form a truss within* the body of concrete or other plastic material which provides the maximum of

supporting strength in the *arch* or surface to be formed".

The implication from this is that it is a beam; "the arch or surface to be formed" can be only a beam, not a column, and so is the description of the figures themselves. For example, line 29:

> "Figure 1 is a vertical section showing the bar applied to supporting *girders or beams.* Figure 2 is an enlarged vertical section on the line 2-2, Figure 1. Figure 3 is a detail perspective of the primary and secondary coils *shown in Figure* 1. Figure 4 is a *similar* view of a modified form using one coil. Figure 5 is a detail plan of the form shown in Figure 3".

With the column of Figure 6 we deal presently. All of these structures of the letters-patent are shown arranged *horizontally.* None of them is vertical. None of them is intended for a column; and none of them, of course, disclosed "column hooping", as it has come to be known in the art. Figures 2 to 5 are said to be details of *the structure shown in Figure* 1; other views of the same thing. There is no idea at all of the column embraced in any of them, and obviously each of them must show a stiff structure; and such is the description even of Figure 4, upon which this fantastic allegation of infringement is based. Page 1, line 57, the patentee says:

> "*The bar* may be provided with a primary coil 6, extending in one direction, as shown in Figure 4, which is sufficient in light con-

> struction; but when a heavier construction is to be used a secondary coil 7 is provided, which extends in the opposite direction to the coil 6 and through the same so as to cross *beneath* the coil 6 at a point directly *above* the bar, thus providing a construction in which all lateral pull or strain of the coil is avoided, owing to the equalization thereof by the oppositely extending coils and the *tendency of the coils to move or flatten toward the face of the bar resisted.* This preferred construction is shown in Figures 1 and 3, and it is also desirable that both of the coils be *deflected away from the center* of the bar, as shown in Figure 1, as the greatest supporting strain carried by the arch is at the center thereof, and this deflection therefore resists such strain and tends to draw the coils upwards *into a position at right angles to the bar".*

So also on the same page, he states that the bar marked 1 in Figure 1

> "provides the necessary strength upon which *the truss structure formed by the coils* is carried."

The whole central fundamental idea is a truss structure "within the body of concrete"; *not* a truss structure formed by the concrete and the iron together, but a truss structure "*within* the body of concrete", *formed by the ironwork* ("the coils") *alone.* To attempt to extend this to a collapsible column-hooping is pure effrontery, and ought not to be countenanced. It is traveling far outside the inventor's idea. It resembles in no particular our column shown in the circular, Plaintiff's Exhibit No. 5, page 51. The

structure there shown is not illustrated or described in the original or reissued patent.

Vandenburgh Did Not Contemplate Two Spacers Upon the Same Coil.

Consider the column shown in Figure 6. It will be noted that the claims (Nos. 1, 2 and 4) say that the coils are

> "free of the bar at the opposite side therefrom to the securing point".

The same idea is in different words in claim 2. That is an accurate description of the column shown in Figure 6, of the coil of Figure 1, and of the details in Figures 2 to 5. Figure 6 specifically shows two sets of two coils each, attached to the spaces 1-1; and carefully *avoids* connecting the coils attached to the left-hand spacer to the right-hand one, and *vice versa;* that is, it carefully *preserves the construction indicated in the claims referred to, in that each coil is secured on one side and is "free of the bar" on the other.* This must mean free of any "bar" (spacer) on the other side; as the coil could not be attached to the *same* bar on both ends of a diameter, of course.

That also is not the form of structure shown in Plaintiff's Exhibit No. 7, page 52; there the plaintiff has illustrated a common and well known form of column-hooping, independently devised *by the defendant* in this case, as set out on page

133, never made by the plaintiff, never indicated in his patent; boldly appropriated by him from the disclosures made in the circulars of defendant. The patent itself indicates *rigidity* in every line and sentence. That was the primary object which the inventor had in mind, and it is of record that

> "Nobody connected with the defendant company ever saw a device of the character in suit which was built by plaintiff or anybody associated with plaintiff; that the devices manufactured and sold by defendant, of which plaintiff's exhibit 3 is a specimen, were designed independently by defendant and were not copied from anybody * * * that the slotting of the longitudinal member to receive the spiral strands and the subsequent fastening of the strands therein by hammering together the open ends of the slots so that the spiral could be collapsed during shipment and at the same time retained within the slots, was a construction *independently worked out by this defendant* and particularly without any knowledge of plaintiff's patent or of plaintiff's alleged invention and as a NATURAL AND OBVIOUS MEANS OF SECURING THE SPIRAL TO THE LONGITUDINAL".
>
> Transcript, page 132, bottom.

If therefore the plaintiff admits that this method of attachment was a "natural and obvious means of securing" the spiral and spacer together, surely he admits unqualifiedly that there is no invention in using it!

Figure 6 is not alleged to be used by the defendant; we point out that it is the *only* form of column shown by the patentee; and the presumption is that he never devised or conceived of any other form of construction of columns as embodying his invention. The record does not disclose that a single pound of his form of reinforcement was ever made, used or sold by anybody; as to Figure 6, a little consideration will show that its complicated interweaving of rods over 100 feet long is quite impracticable.

The Scheme of the Original Patent as it Appeared to the Patent Office Examiner.

(See our "Preliminary", page 1).

A study of the original letters-patent, page 45, including not only the claims in suit said to have been brought forward from the original to the reissue, but also the remaining claims and the text of the description, will show at once that the Examiner of the original application of 1906 had a consistent and logical conception of an integral scheme as embodied in the patent application, claims for which he was willing to allow, and which corresponds with what we have just described; and that the present interpretation given to the patent by the claims of the reissue and by the inventor and his counsel is inconsistent with that scheme, and indeed contradictory of it; and claims describing it were rejected and cancelled, as the price of

issue. Under these circumstances, the language from

Leggett v. *Avery*, 101 U. S., 259;
Mahn v. *Harwood*, 112 U. S., 354;

and

Eby v. *King*, 158 U. S., 366

applies with full force. See page 66 this brief. As in those cases, so in this, the application for the reissue is only a substitution of the judgment of the Commissioner and Examiner of the date of reissue for that of those officers at the date of the original grant; this the cases above and many others uniformly condemn.

The idea of the Examiner was this: This structure submitted to me is composed of two counter-parts, disposed upon opposite sides of a vertical median line or center; that is, two *ends*. These counterparts are so disposed that the strains in one act in the opposite direction to the strains in the other, making a stiff or rigid structure; and that is effected by having a coil (as in Figure 4) or coils (as in other figures) so disposed that it tilts away from the center *in opposite directions* upon the two ends, and stiffens the bar until the ironwork forms a truss; in the language of claim 4 of the reissue and claim 2 of the original, "said coils being deflected in opposite directions from the center of the bar toward the ends thereof"; and in the language of claim 1 of the original, being "rigidly secured" in place.

Even that was not new; but anything outside of it the Examiner consistently and uniformly

rejected, as in the rejection of the original claim 3, found on page 116 of the Transcript; and eventually the attempt to obtain something beyond it was abandoned, and claim 3 (and others) *cancelled.* The alteration of claim 3, (See page 64, this brief) or substitution of a new claim 3, therefore, so that it should specify that it applied to a structure having *"ends,"* was consistent with the whole idea which the Examiner appeared to have in mind; and his acceptance of the modified form of the claim, using the word "end" instead of the word "edge", makes that very plain.

If it be argued that claim 5 uses the term "edge", and not the term "end", which is true, the answer is plain enough from the language of that claim itself; for it proceeds to say that the kerfs are formed so that each has an "overlapping integral spur *projected toward the center* of the bar". That could not be true if the spurs all projected in the same direction. See pages 3 to 6, this brief. And "center" does not mean, as might be argued, the *horizontal* axis of the whole structure including the concrete, or the axial center of revolution about which the coil is formed; because, as will be seen from the figures, the spurs project *away* from that center. Therefore claim 5 is not only *not* inconsistent with the Examiner's idea, but it is wholly inconsistent with any other. These spurs must *reverse in direction at the center;* and thus only would there be a symmetrical structure.

All this was thrown to the winds when the reissue application was filed. Its claims 1 and 2, embodying an idea *never presented* to the Pat-

ent Office in the original and claim 3, reinstating the cancelled claim *repeatedly rejected* because inconsistent with the disclosure of the specification, were mere attempts to obtain from the Commissioner and Examiner of that day protection for an invention which had never been made by the applicant, and which, so far as it was ever submitted to the Commissioner and Examiner at the time of the original grant, had been repeatedly rejected.

Under such circumstances, it cannot be that the reissue should be sustained at all. It is a distinct and deliberate attempt to defraud the public out of something to which, even if the invention had ever been made by the applicant, it had become entitled by dedication. Not only the rights of this defendant, but those of the public at large, have been set at naught by the decision in this case.

The whole underlying idea of the patent was, a rigid bar symmetrically disposed about a center, with coils on the two ends, deflected in opposite directions from the center. Anything outside of that was never conceived by the plaintiff, and should not be secured to him now. Defendant does not use that.

We discuss the validity of the reissue, *quo* reissue, on page 49, etc., this brief.

Necessary Characteristics for Collapsibility not Present in Patent.

Of all the judges who have dealt with this subject, Judge Hough, who decided this case in the District Court, is the only one who has analyzed the structure judicially so as to show the inherent absurdity of the claim that Vandenburgh contemplated a collapsible structure. He said (p. 134, Transcript):

> "Defendant makes and sells a 'collapsible spiral' (deft's Ex. 5, p. 6), used for strengthening concrete construction, consisting of a cylindrical helix of steel wire fitted (usually) to two "spacers' a diameter apart, and each engaging every convolution of the helix, *of which the rise is so slight and the engagement with the "spacers' so loose that the construction which is normally stove pipe shaped, can by moving the metal rods called 'spacers' longitudinally in opposite directions be flattened out and then conveniently crated for transport.*
>
> • • • • • • • • • • •
>
> (Page 135).
>
> To this apparatus there are two essentials, one that the helical convolutions be close, and second that the wire be so fastened to the 'spacers' that it can turn in place; unless both of these conditions are fulfilled it cannot collapse."

All this is absolutely correct. If the turns of a coil be so far apart as to show in side

elevation a triangle with a substantial base, the coil *cannot* be collapsed, if the base points be held apart, either rigidly or loosely. The condition is as stated by Judge Hough; that is, the two points of the base of the triangle must be reasonably close together, the limiting feature being the amount of flexibility in the coil and looseness in its attachment which will permit its tilting. Under these conditions, collapsibility is provided.

Plaintiff contends that its structure shown in Figure 4 embodies this collapsibility. When constructed according to the proportions shown in the original Patent Office drawing, page 45, this is not so, even if only the part of a beam shown in Figure 4 is used. There the base and height of the triangle are substantially in the proportion of 2 to 3. This will not collapse; indeed cannot be made to do so without deformation.

The proportions shown in the drawing of the reissued letters-patent are very slightly different. They do not affect the proposition, so far as collapsibility is concerned; if they do, there would be a variance which would be fatal to the reissue; that is, if the structure shown in Figure 4 of the original would not collapse, and that shown in Figure 4 of the reissue would, then the reissue is not for the same structure.

The *whole structure* of which Figure 4 shows only a part should be considered; and as the coils are wound in opposite directions; and as the pulls are in opposite directions; and as the central, or triangular, turn is of such a character that it cannot be collapsed; and as the col-

lapsibility of the two ends of the coil, if it were present at all, would be in opposite directions; it is as certain as language and drawing can make it that the inventor *never had any idea at all* of making a collapsible structure. See page 58, this brief.

Even if all this reasoning were unsound and even if all the undisputed facts upon which we have based it were not present, nevertheless it is *admitted by the stipulation*, Trans., p. 133 that the method of making the defendant's structure collapsible was original with the defendant, and was not due to the plaintiff at all.

Mr. Vandenburg's whole idea was to use a spacing bar with a coil of wire so arranged upon the bar that without the use of any other spacer than the one, and with the turns of the coil "free of the bar" everywhere but at the points at which they are attached to the one spacer he would get a rigid structure, independent of the concrete. The whole underlying idea was that of *rigidity*. As Judge Hough says, page 137 Transcript, folio 411:

> "This is Vandenburgh's invention; he never disclosed collapsibility; what he shows will not collapse; what he does show bears scarcely a remote resemblance to what defendant makes and sells."

and on page 138, second paragraph:

> " * * * claims 1 and 2 originally called for a spiral coil 'rigidly' secured to the reinforcing bar; as a reissue the phrase is 'permanently' secured. The evidence makes it

> plain that *this change was made to catch manufacturers* like defendant, but I shall not consider intervening rights because it is thought clear that *rigidly* is exactly what the patentee meant. This is seen from the nature of his 'truss' and the representations made in argument to the Examiner",

referring further to the file wrapper.

No part of this reasoning is disapproved or answered by the Circuit Court of Appeals. It only asserts that defendant's device is a "commercial improvement" which provided collapsibility. It was a reorganization which gave utility to a useless thing. The *thing plaintiff devised* cannot be made to collapse, by "improvement" or otherwise.

The Mistake of the Court of Appeals Concerning Mr. Cummings's Testimony.

Our Circuit Court of Appeals in its first opinion (258 F. R., 143, Transcript, p. 150) said (151):

> "The defendant's witness Cummings frankly admits that this form of reinforcing structure *was new in cement work* and has come into general use".

Its whole decision is based on this fundamental error.

Nowhere does Mr. Cummings say that; or anything which by any latitude of interpretation ought to be called its equivalent. Plaintiff was repeatedly challenged to point out *in the record* where Mr. Cummings had said any such thing, and could not do so.

NOWHERE IN HIS DEPOSITION (OF 28 QUESTIONS) DOES HE MENTION THE PATENT IN SUIT AT ALL!

Mr. Cummings was *not "defendant's witness"*. He was the defendant's witness in the suit in the Third Circuit against the Electric Welding Company and was indeed the president of that corporation, and the man who designated its ironwork, being a skilled engineer. His testimony was introduced in this case by stipulation at the solicitation of the plaintiff, in order to avoid the expense, and perhaps the impossibility, since he was hostile to the patent, of taking it a second time; and the certain impossibility of producing him in open court in the Second Circuit. This is not a very important distinction, but it does have some bearing upon the weight to be attached to such a statement (if he had made it) as the Court thinks he has made, since it would be against his interest. Being plaintiff's witness, it does not have that additional weight.

But in order to contrast most forcibly what Mr. Cummings *did say* with what the Court *thought he said*, we quote his testimony, beginning on page 26, Transcript, and ending on page 28, as follows:

"Q. 11. When did the *Electric Welding Company* first manufacture the column reinforcement consisting of a *spiral with two* oppositely disposed vertical bars, such as shown in Plaintiff's Exhibit No. 1? A. Some time during the year 1911".

(Mr. Vandenburg's patent, does not show that at all!)

"Q. 12. Mr. Cummings, out of the four patents presented by you and offered in evidence as your own patents, I understand none of them in any way discloses anything at all with respect to spiral concrete reinforcing. A. None whatever".

(Mr. Vandenburgh has no claim to "spiral concrete reinforcing").

"Q. 13. When you were using a series of hoops, you must have welded or riveted the joint for each hoop, must you not? A. Yes.

Q. 14. This would make an enormous number of joints in a good-sized building, would it not? A. Yes.

Q. 15. In the same building, *if spirals were used in place of hoops,* there would be only a few joints and those few would be easily made, would they not? A. Yes".

("Spirals in place of hoops" were forty years old).

"Q. 16. Then this would be an advantage in that form of construction? A. Yes.

Q. 17. A practical advantage or a commercial advantage, of great commercial advantage in fact? A. Yes, of great commercial advantage.

Q. 18. The possibility of collapsing the spirals is of considerable advantage in shipping, is it not? A. In shipping, yes".

("What he (Vandenburgh) shows will not collapse". *Judge Hough.*)

"Q. 19. And that is still a further advantage? A. No, sir, that is the only advantage they have, otherwise, they are a disadvantage.

Q. 20. Do you mean to say that the advantage you told us about the joint has now disappeared? A. No, sir, not necessarily. That is incidental, just like collapsing. The other is not incidental.

Q. 21. In other words, there is an advantage in only having a few joints? A. Collapsibility is incidental to that type of construction.

Q. 22. Is it not also true that as a manufacturing proposition, it is much easier *to make a single long spiral* than a series of rings? A. Yes.

Q. 23. Is it not also true that it is easier to assemble the spiral unit than a unit made of a series of rings? A. No, you have the same number to put down in each case.

Q. 24. But would it not be more convenient to put up a bundle of longitudinals than to pick up a number of separate rings? A. We have not found it so.

Q. 25. Will you tell me why you abandoned the use of rings and adopted the spirals? A. Because of the joint.

Q. 26. Then there is a gain by that change? A. Yes, a manufacturing gain".

(A gain inherent in the old helix or "spiral").

"Q. 27. What experience had you, of your own knowledge, of *spirals with integral*

fastenings to longitudinals in use prior to 1907 and 1908? A. No practical experience, except what I obtained from books".

(All courts have denied that to be Mr. Vandenburgh's invention).

"Q. 28. And prior to that time, contractors used wires to secure the spirals to longitudinals? A. *As far as I know,* they did, yes."

It seems very clear that what the Court attributed to Mr. Cummings *was never said at all,* by Mr. Cummings or anyone else; and that what he did say was with reference to his own structure (Q. 11, above) made by the Electric Welding Company, which his Circuit Court of Appeals (263 F. R., 95) declared did not infringe the Vandenburgh patent. Of course, if it does not embrace the construction of Vandenburgh, nothing which he said about it can be attributed to that patent. What he did say was that the so-called spiral or helix had an advantage over independent rings or hoops, such as he had been using and had described in his patent (Transcript, p. 90) and that (obviously when constructed according to the method *of the defendant in this case*) *when collapsible* these show "great commercial advantage"!

This is far from saying that the construction *of the Vandenburgh patent* was *"new in cement work"*! If he had said that, it would not have been true; and it will be noted that in the only place where he says that contractors had used a wire tie to hold the longitudinals and coils together, he properly qualified it by saying "as far as I know" they do.

But Mr. Cumming's statement does not bind us; he was not our witness, not a partner in our concern, nor privy to the present suit in any way, and had no authority to make statements which would bind us. Furthermore, and more important than that, the references in this present record show that the continuity of the coil as distinct from the separate hoops of Cummings had been *known for forty years.* Mr. Cummings has no power to strike out of the case the references which we have assembled and now bring to the attention of the Court; and certainly a decision of the Court of Appeals which gives that effect to his statements about his own construction, and ascribes and attributes its advantages to the unmentioned Vandenburgh patent, is so far wrong, so radically incorrect, that the decision itself is erroneous *in toto.*

Validity.

I. THE ORIGINAL LETTERS-PATENT ARE INVALID FOR ANTICIPATION, IF THEIR SCOPE IS AS CLAIMED BY PLAINTIFF.

II. THEY ARE INVALID IN ANY EVENT FOR WANT OF INVENTION OVER THE PRIOR ART.

III. THE REISSUE WAS UNWARRANTED AND INVALID. (See Reissue Defenses, p. 49.)

The Prior Art.

We have shown that Vandenburg's whole idea was a *rigid beam,* composed of a helix with turns slanting in opposite directions from its middle point and attached rigidly to a spacer, only a single spacer being used, except in the case of Figure 6, and *in no case* showing a coil attached to *two* spacers; that the device was not collapsible, but formed a truss; that the defend-

ant's device is collapsible, does not form a truss, and was independently devised by the defendant, as is conceded, as "the natural and obvious" way of attaching the coil of wire to the two spacers so as to make the device collapsible; and that no part of this was due to any knowledge of the plaintiff's patent.

This brings us to a discussion of what is shown in the prior art; because, even assuming the validity of the plaintiff's patent, if the same result had been accomplished by others, then we may take from the prior art the elements of his structure and combine them in any way we see fit; if we do not use his fundamental idea in making this combination, then obviously we do not infringe. And furthermore, if the assembling of the elements, even in the exact form shown by plaintiff, is "the natural and obvious" way of assembling them, then equally naturally and obviously there is no invention present, and the plaintiff's patent cannot be sustained.

We have had prepared for the convenience of the Court a series of drawings showing a part of the prior patented art, which are appended to the brief and are called Drawing Nos. 1 to 14. Colored copies, more convenient than large charts for a Court of many judges, are bound in separate sets; they differ from those in the brief only in being colored. Briefly they are as follows:

DRAWING No. 1

shows *the helical coils* in the reinforced concrete art, and in analogous branches of the metal-working arts. (To any objection that

these metal-working arts are not available as defenses, we oppose the opinion of the Circuit Court of Appeals for the Sixth Circuit in the case of *Vandenburgh* v. *Truscon Steel Company*, also now before this Court; Appendix C to our brief. That Court said, bottom of page 147 or 277 F. R., p. 348, middle):

> "We recognize that the use of diagonal kerf and overhanging spur method of connection in a non-analogous art did not anticipate the combination claim in question; but we are not considering anticipation, but invention, and the prior art in question is thus not irrelevant".

Citing:

> *Day* v. *Mountain City Metal Co.*, 264 F. R., 963; *Berger* v. *Trussed Steel Concrete Co.*, 257 F. R., 741, both in the Sixth Circuit.

DRAWING NO. 2

shows in its upper part the *spacers* used in the concrete art, and in its lower part the spacers used in the metal-working art. Of the latter, two are screens for sand and gravel, such as are used in preparing concrete all over the world, and two are respectively a concrete and a metal fence post, used to space line-wires apart.

DRAWING NO. 3

shows examples of "*integral securing means*", which is the definition of plaintiff in his Ex-

hibit No. 7, page 52 of the Transcript; *"all forms of integral securing means"*. The McClure patent and the Barnes patent show the identical means used by plaintiff, showing it much better than his own drawing, and were pending in the Patent Office with his application. The Norwood structure shown on the left of this drawing No. 3 was a method used in attaching the wires of a sand screen used in the concrete art, and has a diagonal kerf and overhanging spur hammered down over the wire. This antedates the defendant by ten years and fully justifies the Circuit Court of Appeals for the Sixth Circuit in calling it a "common mechanical expedient".

DRAWING No. 4

shows the Hyatt English patent of 1874. This helical coil used to reinforce a concrete column is attached to the spacer by a rivet, which is described in the specification, but not shown in the drawing. This is a stiff structure like Mr. Vandenburgh's.

DRAWING No. 5

shows the Kieserling German patent of 1892. We particularly ask the attention of the Court to this patent, because of the comment upon the evidence of Mr. Cummings above referred to.

It is to be noted that Figure 7c, shown on the right of Drawing No. 5, is the precise form of

structure used by the Truscon Company, defendant in the companion suit in the Sixth Circuit, now before this Court. What the Truscon Company did after putting the rods into the square notches shown in this structure was to peen or swage the notch-edges together, as shown for example in Drawing No. 3 in the Prescott sketch, or the Barnes drawing. This Kieserling structure is fourteen years before the plaintiff's patent.

DRAWING No. 6

shows an *all metal* fence-post, with a method of attaching line wires thereto much like that shown in the Drawing No. 3 as having been used by Mr. Cummings in 1905.

DRAWING No. 7

shows the sand-screen of Prescott and Bennett, and as indicated in the legend thereon "This is the form of attachment used by the Truscon Company". We have had this made on an enlarged scale and in perspective so that the Court may see how much it is like what the plaintiff now asserts is his invention. To turn up the screen on end may constitute invention; but we think not.

DRAWING No. 8

shows another sand-screen, and the structure of the spacing bar shown by Norwood in this is

identical with that used by defendant in this case. This is a very much better illustration of a suitable kerf and spur than that found in the defendant's patent on page 48. It does not, however, secure a helix, but parallel rods.

DRAWING No. 9

shows Clark's metal fence-post with a kerf and spur of different form for attaching the line wires.

Obviously, it is an "Integral securing means," nine years earlier.

DRAWING No. 10

shows the Eason patent kerf and spur, and in the enlarged detail shows *exactly* the construction which is only obscurely indicated in the patent drawing of Mr. Vandenburgh. This is a concrete fence-post; the spacing bar, it is said in Eason's patent, may be of metal; and the kerf and spur is used. The rings which surround the post are used to hold the spacing bar G in position; but it also holds them in position. The wire shown in section in the kerfs is the line-wire, *not* the wire of the rings. Clearly this is an "integral securing means" available to defendant, and it is absurd to suppose that the plaintiff may monopolize it, four years later.

DRAWING No. 11

shows the well known Considere patent. In this the helix is not attached to the vertical rods. All the courts have paid considerable attention to this inventor, as he was one of the first to write upon the art of reinforcing concrete.

DRAWING No. 12

shows two forms of integral attaching means devised by Mr. Cummings, of whose testimony we have spoken; the one on the right is that used by the Electric Welding Company and held not to be an infringement. Date 1905.

DRAWING No. 13

shows the McClure co-pending application. This does not antedate the patent in suit; but it is at least contemporary therewith, and it shows that persons having occasion to attach spacing bars to helixes would "naturally and obviously," in the language of the stipulation, do *just what McClure did, and just what the defendant did,* and just what Norwood and Eason and Barnes and Prescott did. Is that invention?

The fact that this case was co-pending is also conclusive that the Examiner, before whom those cases were at the same time, did not conceive

that the Vandenburgh structure showed the helical coil *used for a column,* except as disclosed in Figure 6; because the Patent Office rules required the Examiner, as we explain page 80, this brief, if he believed the two to interfere, to prepare issues and propose them to the parties for an interference, of which there is no record.

DRAWING No. 14

shows on a larger and more intelligible scale the drawings attached to the Vandenburgh reissue.

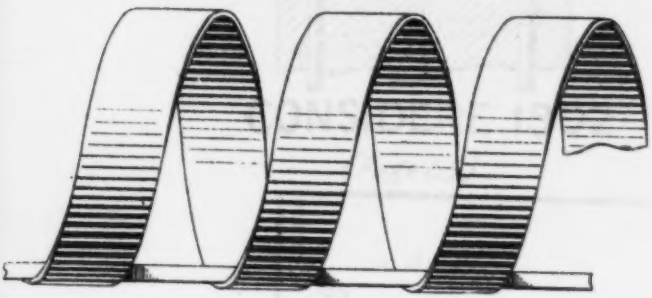
The origin of each figure in each drawing is given adjacent thereto.

DRA

EXAMPLES OF HELICAL COILS IN RE
PRIOR IN DAT

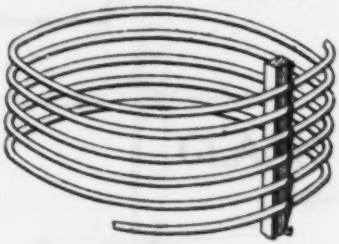
K

HYATT, 1874
(Page 106, Transcript)



B

CONTEMPORARY
McCLURE, 1906
(Page 94 Transcript.)

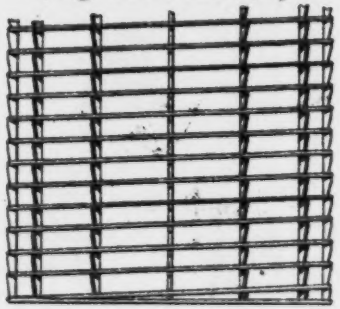


DRAWING NO. I.

COILS IN REINFORCED CONCRETE ART, SHOWN IN RED, IOR IN DATE TO VANDENBURGH

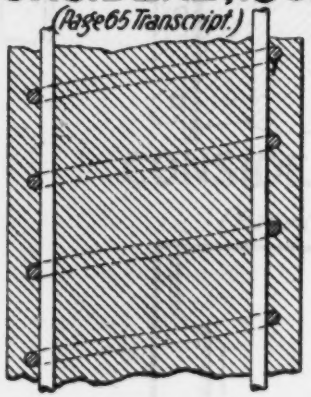
KIESERLING, 1892

(Page 108 Transcript.)



CONSIDERE, 1902

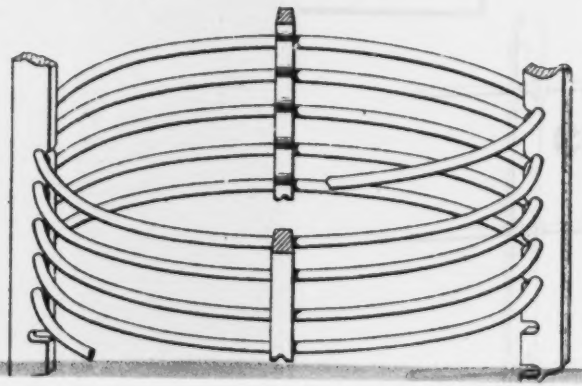
(Page 65 Transcript.)



BOTH METAL-WORKING AND CONCRETE ARTS

PRESCOTT AND BENNETT, 1890

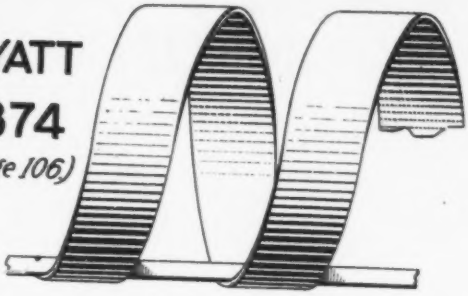
(Page 55, Transcript)

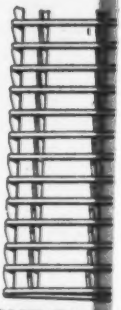


illustrated in patent drawing.

SPACERS USED IN

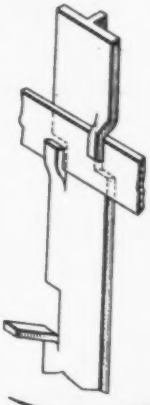
HYATT
1874
(Page 106.)

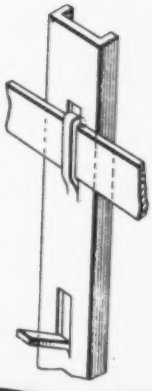




KIESE

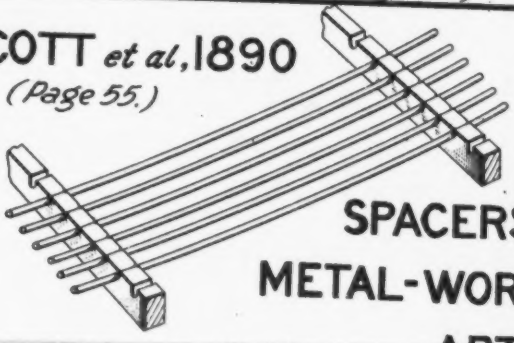
EASON, 1902
(Page 63.)





CUMMINGS, 19
(Page 90.)

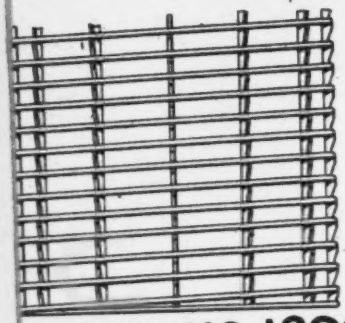
PRESCOTT *et al*, 1890
(Page 55.)



SPACERS IN
METAL-WORKING
ART

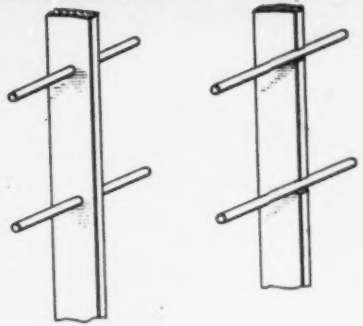
DRAWING NO. 2

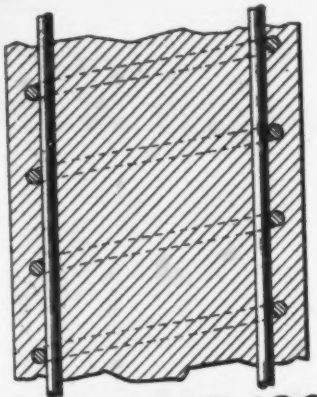
) IN CONCRETE ART, SHOWN IN BLUE



IESERLING 1892

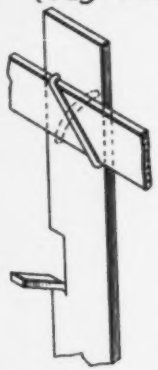
(Page 108.)

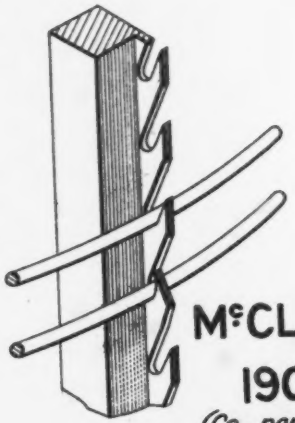




CONSIDERE 1902

(Page 65.)





McCLURE, 1906

(Co-pending.)

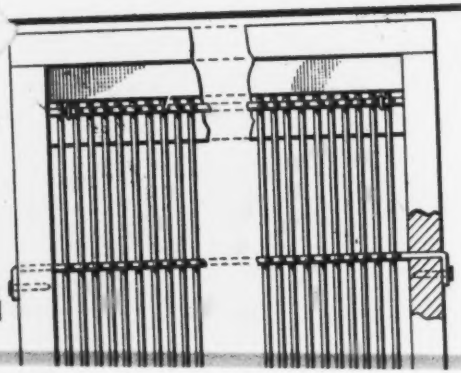
(Page 94.)

CARSON, 1883

(Metal Working Art.)

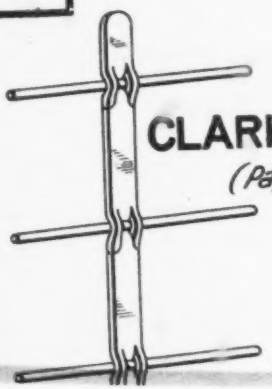
t al.

Rivet described, but not illustraled in patent drawing.



RS IN

RKING

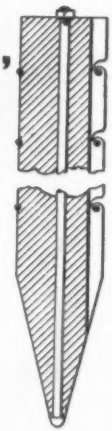


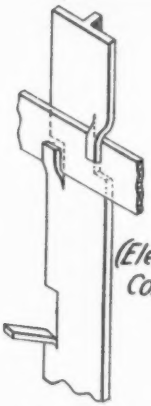
CLARK 1897

(Page 60.)

EXAMPLES OF
IN CONCRETE AND MET
MA

EASON,
1902
(Page 63).



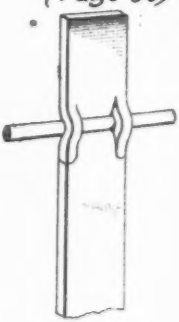


(Electric Welding Company Suit.)

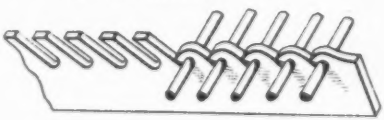
CUMMINGS, I
(Page 90).

KI

CLARK 1897
(Page 60)



NORWOOD, 1896
(Page 57)
Sand Screen



3

SECURING MEANS"

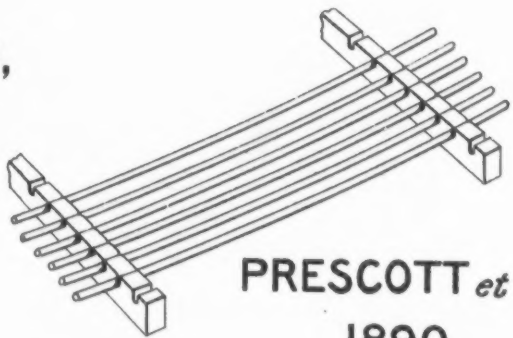
ARTS, SHOWN IN YELLOW.

N USE

CARSON,

1883

(Page 53)



PRESCOTT *et al.*,

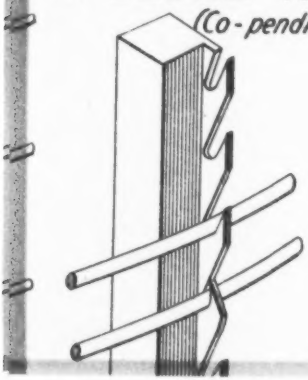
1890

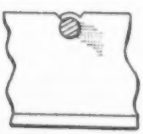
(Page 55).

92

McCLURE 1906

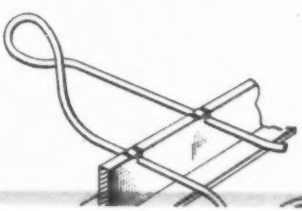
(Co-pending.)





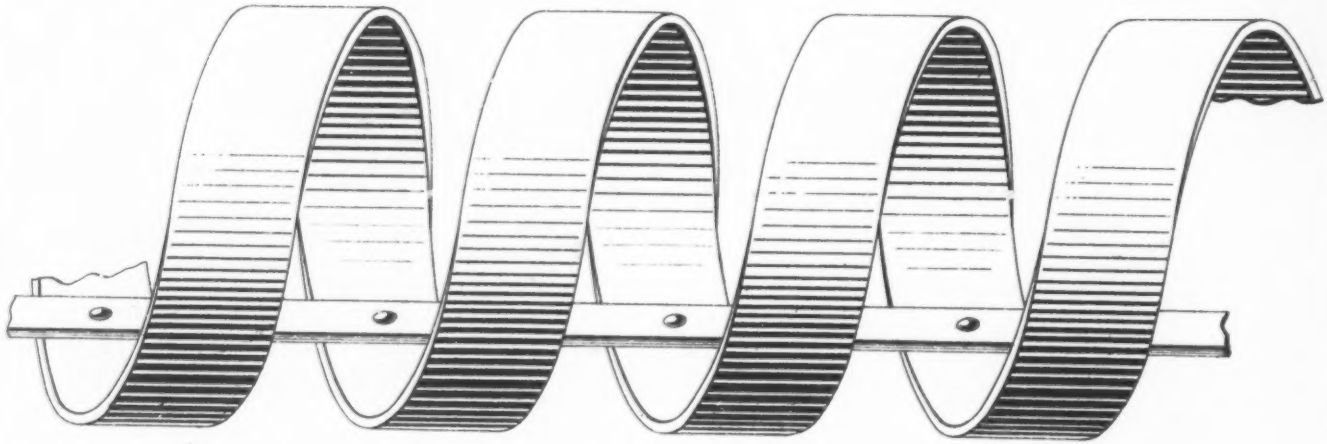
BARNES, 1906

(Page 101, Co-pending)



HYATT 1874

(Page 106)

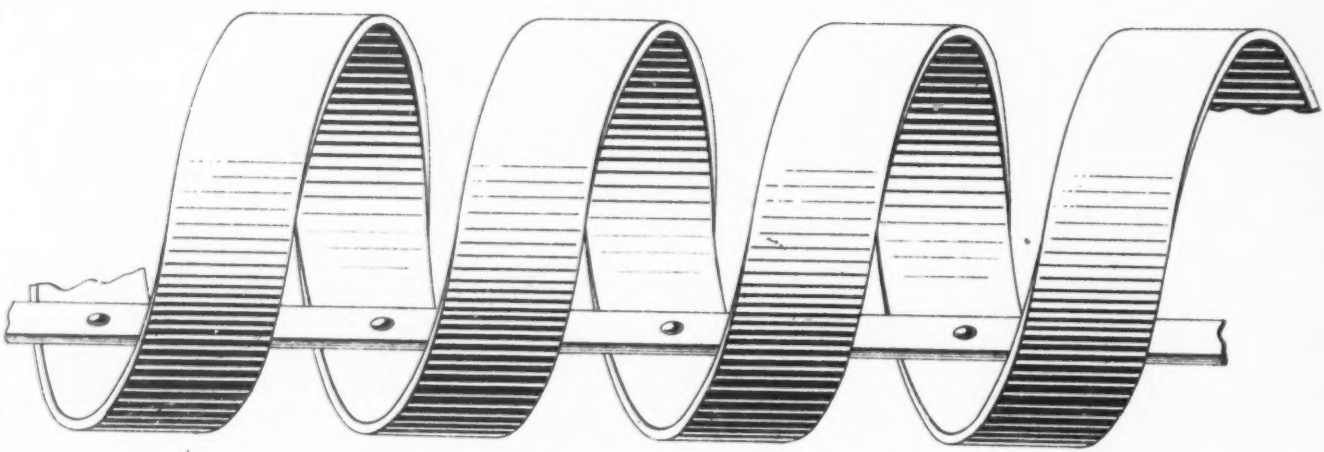


Rivet described, but not
illustrated in patent drawing.

DRAWING NO. 4

HYATT 1874

(Page 106)



Rivet described, but not illustrated in patent drawing.

DRAWING NO. 5

KIESERLING 1892

(Page 108)

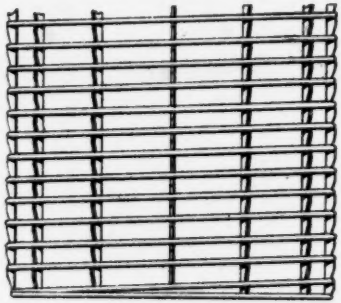
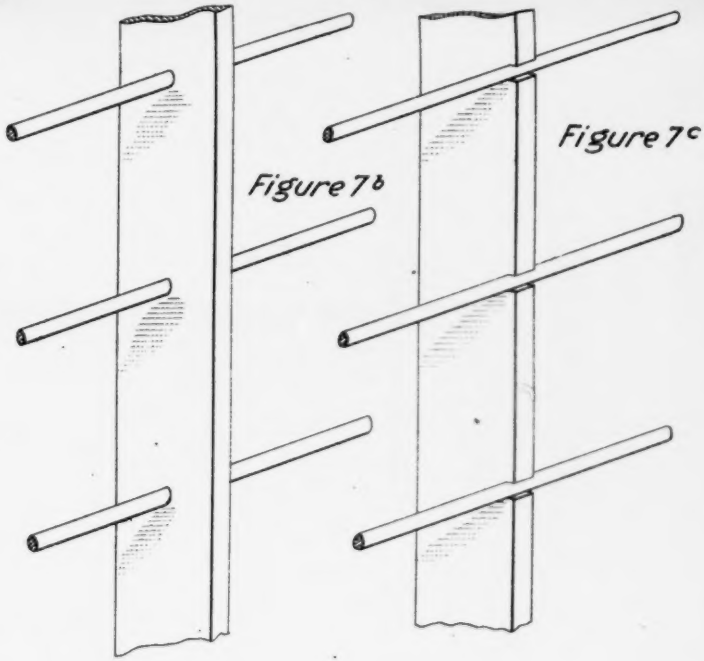


Figure 5.



Figures 5 and 7c show form of reinforcement used by Truscon Steel Company, defendant in the Sixth Circuit: there asserted to infringe.

DRAWING NO. 6

CARSON, 1883

(Page 53)

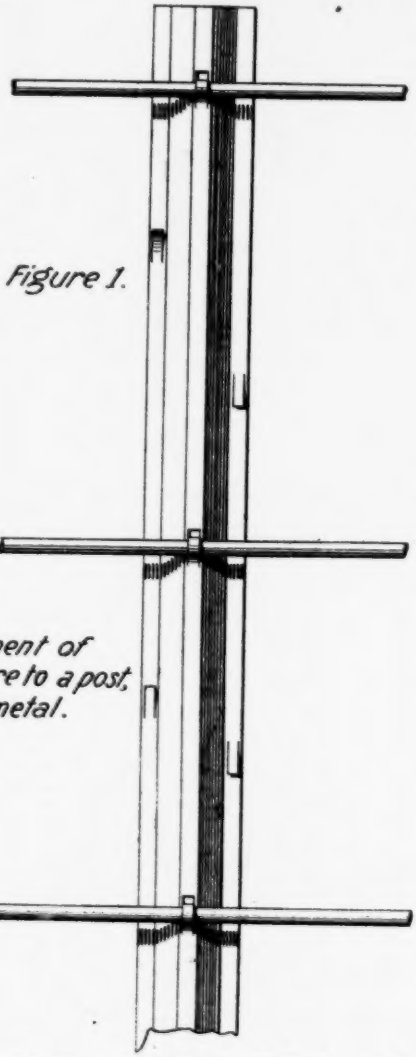


Figure 1.

Attachment of line-wire to a post, all metal.

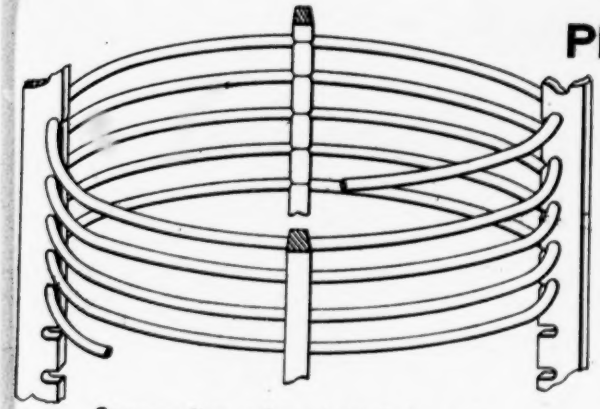
Figure 4.

DRAWING NO. 7

PRESCOTT AND BENNETT, 1890

(Page 55)

SCREEN USED IN PREPARING CONCRETE



Perspective of part of Figure 1.

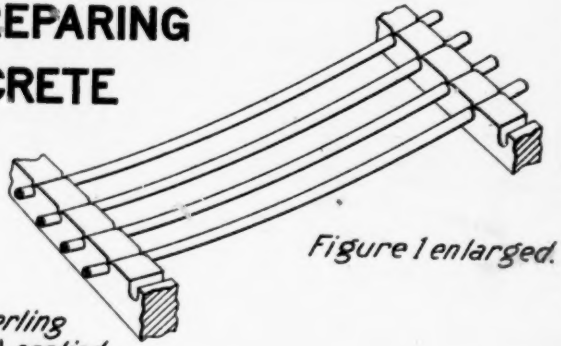


Figure 1 enlarged.

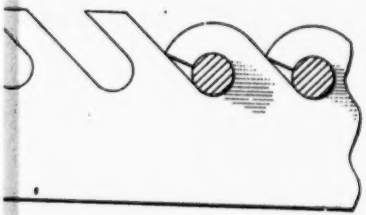
The same structure shown in Kieserling Drawing No. 5 (page 108, Transcript), applied to a hooped concrete column. Also the same as used by the Truscon Steel Company, defendant in the Sixth Circuit, and there asserted by this plaintiff to be an infringement.

DRAWING NO. 8

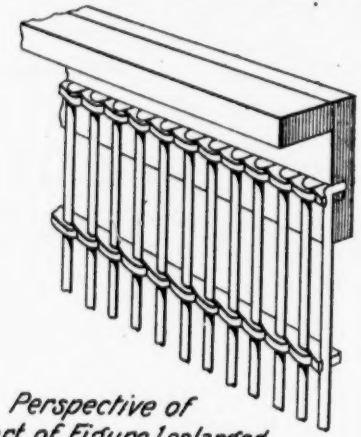
NORWOOD, 1896

(Page 58)

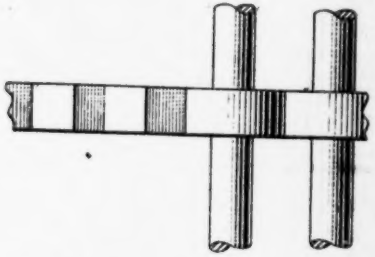
SAND SCREEN USED IN PREPARING CONCRETE



Part of Figure 2 enlarged.
Superior form of attachment
"preferrd" by patentee.



Perspective of
part of Figure 1 enlarged.



Part of Figure 3 enlarged.
Plan of parts shown in Figure 2.

DRAWING NO. 9

CLARK, 1897

(Page 60)

Figure 2.

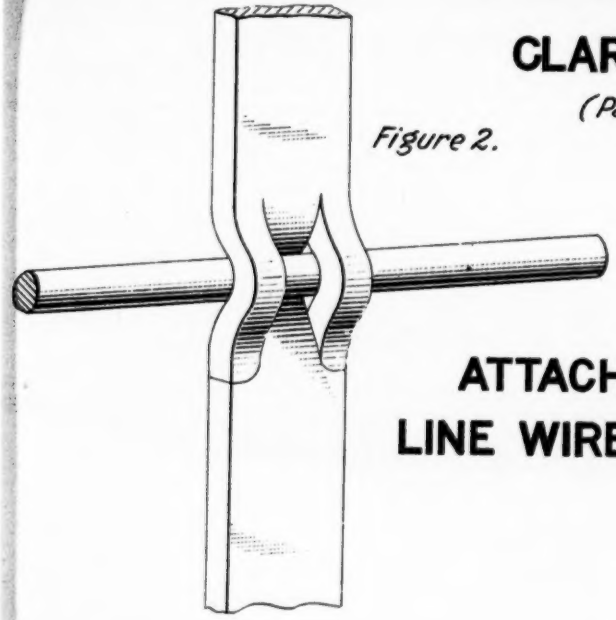
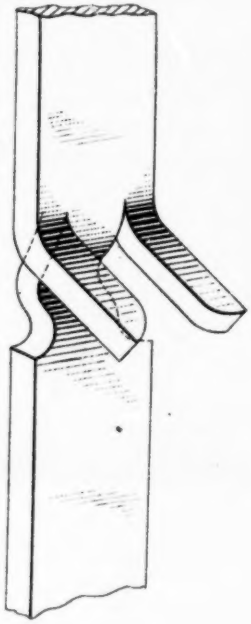


Figure 3.



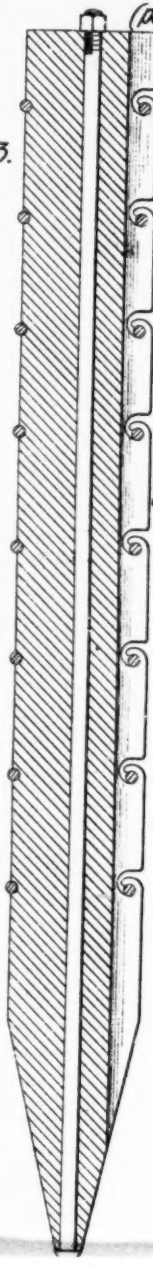
ATTACHMENT OF LINE WIRE TO A POST

DRAWING NO. 10.

EASON PATENT. 1903

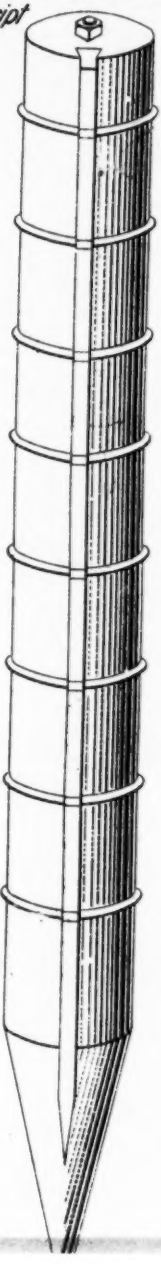
(page 63 transcript concrete fence post.)

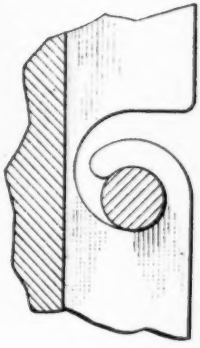
Figure 3.



Independent rings, not a helix.

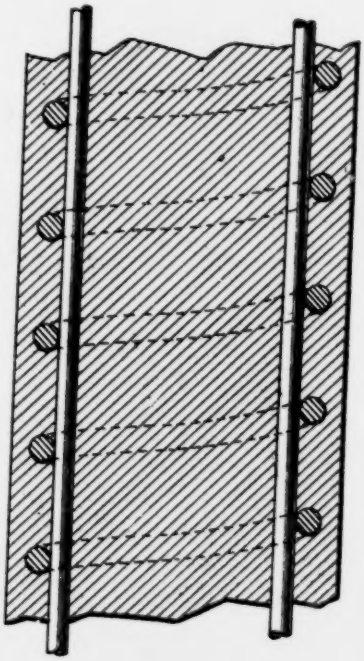
Figure 1.





DRAWING NO. 11.

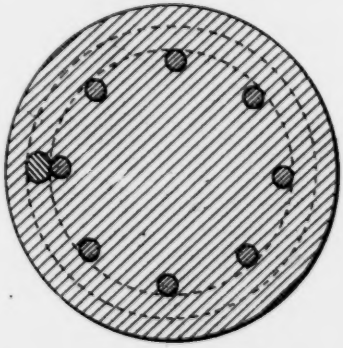
Figure 3.



CONSIDERE, 1902

(Page 91)

Figure 4.

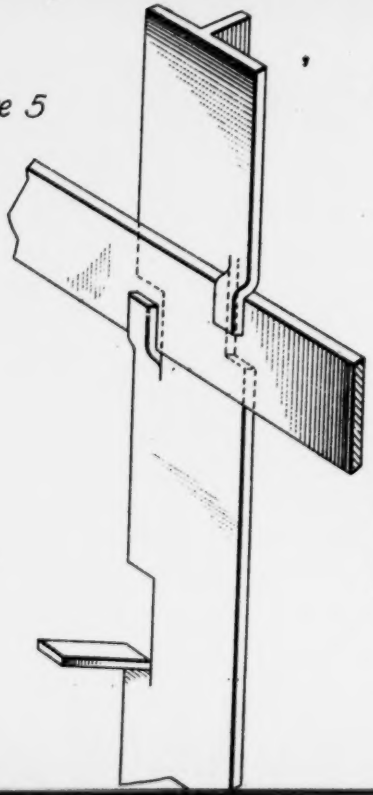


No connection between coils and

DRAWING NO. 12

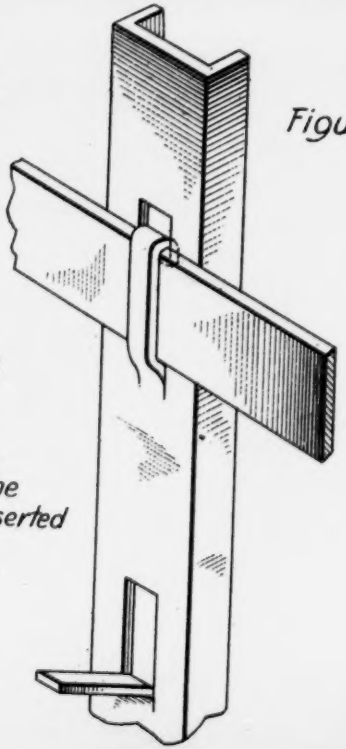
CUMMINGS, 1905

Figure 5



Prior in date to patentee Figure 6 is the form of attachment used by the Electric Welding Company defendant in the suit in the Third Circuit and there asserted by this plaintiff to be an infringement.

Figure 6



DRAWING NO. 13

McCLURE CO-PENDING PATENT, 1906

(Page 95 Transcript)

7 months later in application than Vandenburgh.

Figure 3 (5).

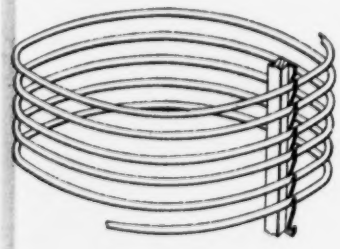


Figure 1.

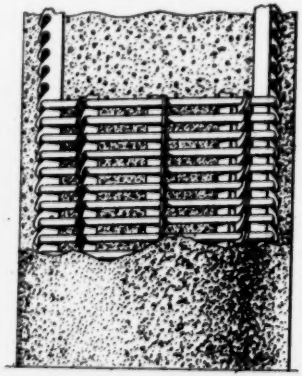
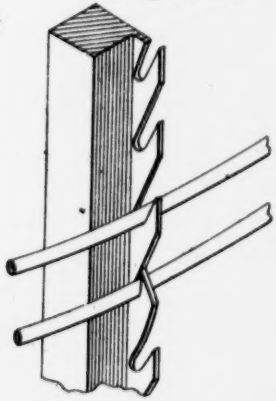


Figure 3.

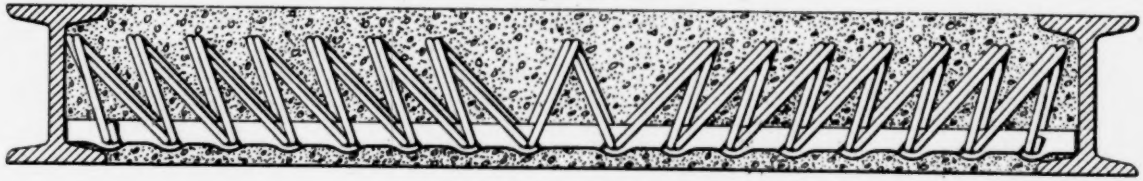


DRAWING NO. 14

VANDENBURGH RE-ISSUE, 1906

(Page 48, Transcript)

Figure 1.



A "TRUSS STRUCTURE"

Patent, page 1 lines 21-55-101.

A "TRUSS STRUCTURE"

Patent, page 1 lines 21-55-101.

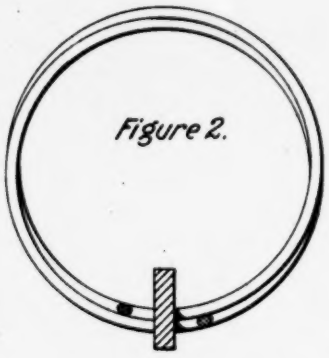
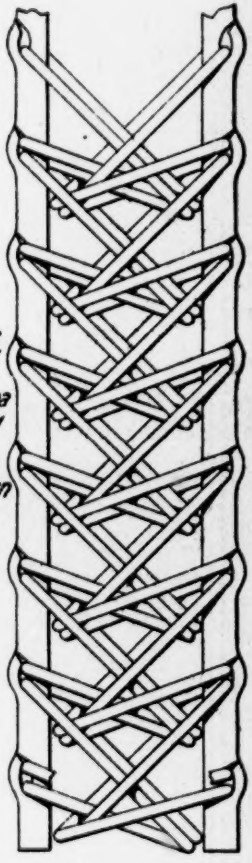


Figure 2.

Figure 3.

Detail perspective of ××× Figure 1.
Patent page 1, line 32.

Figure 6.



Vandenburgh's idea of a column Page 1 of pa.'ent, line 89. The only one shown or described.

Basis of suit. Beam like Figure 3. Patent, page 1, line 70.

Figure 4.

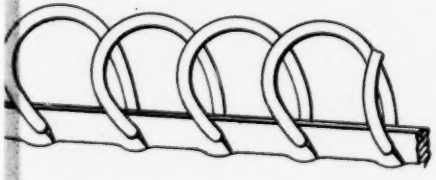
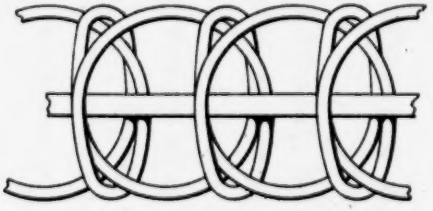


Figure 5.



(Plan of Figure 3)
Patent page 1, line 36.

THE REISSUE DEFENSES.

If the Court shall be of the opinion that the original letters-patent are invalid for direct anticipation; or for want of invention over the prior art; it will not be necessary to consider the following portion of our Brief, which deals solely with the defenses based on the reissue.

The Reissue Defenses.

Practically all of the defenses applicable to a reissue are available in the present case. If the Court believes that the original letters-patent were invalid, then the plaintiff had nothing to surrender, and the reissue will fall with the original.

I. THE REISSUE IS INVALID FOR DELAY IN APPLYING, THE ORIGINAL HAVING ISSUED JANUARY 22, 1907, AND THE APPLICATION FOR REISSUE HAVING BEEN MADE JULY 1, 1916, NINE YEARS AND FIVE MONTHS LATER. AS THIS WAS FOR THE PURPOSE OF BROADENING THE CLAIMS, THE DELAY WAS FAR TOO GREAT.

II. THE REISSUE IS VOID *IN TOTO* FOR LACHES, AS DISTINCT FROM DELAY; LACHES CONSISTING IN FAILURE TO APPLY FOR CORRECTION FOR SEVEN YEARS AFTER THE PLAINTIFF WAS AWARE OF THE ALLEGED DEFECTS IN HIS LETTERS-PATENT, WHICH WERE "INSTANTLY DISCERNIBLE ON OPENING THE LETTERS-PATENT."

III. THE REISSUE IS VOID *IN TOTO* BECAUSE THE OATH ACCOMPANYING THE APPLICATION WAS FALSE, INASMUCH AS IT STATES IMMEDIATE APPLICATION AFTER DISCOVERY OF THE ALLEGED ERRORS:

> "AS SOON AS SAID ERRORS CAME TO HIS KNOWLEDGE AND ATTENTION, HE APPLIED FOR THIS REISSUE"; Transcript, p. 124;

WHICH THE PLAINTIFF CONTRADICTED IN HIS TESTIMONY ON THE STAND, STATING THAT HE KNEW OF THE DEFECTS IN 1909; Transcript, p. 21.

IV. THE REISSUE IS INVALID BECAUSE OF ILLEGAL EXPANSION, MAKING IT FOR A DIFFERENT INVENTION FROM THAT SET OUT IN THE ORIGINAL. ALL THE COURTS WHICH HAVE CONSIDERED THE CASE HAVE SO HELD, AS TO CLAIMS 1 AND 2. CLAIMS 3 AND 5 HAVE BEEN GIVEN THE SAME SCOPE AS THESE VOID CLAIMS.

V. THE REISSUE IS INVALID BECAUSE IT REAPPROPRIATES A CLAIM CANCELLED IN THE PROSECUTION OF THE ORIGINAL CASE; TO WIT, THE THIRD CLAIM, UNDER WHICH DEFENDANTS IN THIS CASE HAVE BEEN HELD. A SUBSTANTIALLY SIMILAR CLAIM WAS *REPEATEDLY* REJECTED IN THE PROSECUTION OF THE ORIGINAL CASE, AND ONLY AFTER CHANGING THE WORD "EDGE" TO "END" WAS THE CLAIM ALLOWED. IN THE REISSUE THE WORD "END" IS CHANGED BACK TO "EDGE", AS IN THE REJECTED CLAIM.

VI. THE PLAINTIFF IS ESTOPPED TO ASSERT THE REISSUE AS AGAINST THIS DEFENDANT, BY REASON OF ITS LACHES IN SUING, AND ITS ACQUIESCENCE IN THE CONSTRUCTION WHICH DEFENDANT PLACED UPON HIS ORIGINAL PATENT, AND ASSERTED TO HIM IN APT TIME.

I.

Regardless of the other parts of the defense based on the acts of the plaintiff in obtaining a reissue, the present reissue is clearly void because of the excessive delay in applying. It was long ago held by this Court that any delay of over two years, in analogy to the statute allowing two years public use, presumptively rendered a reissue improper, and always required explanation; and that a less delay might require explanation under some circumstances, such as an active market for the invention, in which many were concerned, or the like. The leading case, one which has never been disapproved or modified, is

Miller v. *Bridgeport Brass Company*,
104 U. S., 350,

decided in 1881. We quote the following matter from that case:

> "The invention *proved a failure*, but it was found that the use of one of the domes (and the other parts), with the restoration of the chimney, would be a real improvement, and both the complainant and the defendant made such lamps in large quantities. Fifteen years after the original patent was granted, the patentee (or rather his assignee) discovers that the improved lamp was really a part of his original invention, and that by inadvertence and mistake he had omitted to claim it.
>
> • • • • • • •

But there is another grave objection to the validity of the reissued patent in this case. It is manifest on the face of the patent, when compared with the original, that the suggestion of inadvertence and mistake in the specification was a mere pretense; or if not a pretense, the mistake was so obvious as to be instantly discernible on opening the letters-patent, and the right to have it corrected was abandoned and lost by unreasonable delay. The only mistake suggested is, that the claim was not as broad as it might have been. This mistake, if it was a mistake, was apparent upon the first inspection of the patent, and if any correction was desired, it should have been applied for immediately.

These afterthoughts, developed by the subsequent course of improvement, and intended, by an expansion of claims, to sweep into one net all the appliances necessary to monopolize a profitable manufacture, are obnoxious to grave animadversion. The pretense in this case, that there was an inadvertence and oversight which had escaped the notice of the patentee for fifteen years, is too bald for human credence. He simply appealed from the judgment of the office in 1860 to its judgment in 1876; from the Commissioner and Examiners of that date, to the Commissioner and Examiners of this; and upon a matter that was obvious on the first inspection of the patent.

* * * * * * *

And when, if a claim is too narrow—that is, if it does not contain all that the patentee is entitled to—the defect is apparent on the face of the patent, and can be discovered as soon as that document is taken out of

its envelope and opened, there can be no valid excuse for delay in asking to have it corrected. Every independent inventor, every mechanic, every citizen, is affected by such delay, and by the issue of a new patent with a broader and more comprehensive claim. The granting of a reissue for such a purpose, after an unreasonable delay, is clearly an abuse of the power to grant reissues, and may justly be declared illegal and void. It will not do for the patentee *to wait until other inventors have produced new forms* of improvement, and then, *with the new light thus acquired,* under pretense of inadvertence and mistake, apply for such an enlargement of his claim as to make it embrace these new forms. Such a process of expansion carried on indefinitely, without regard to lapse of time, would operate most unjustly against the public, and is totally unauthorized by the law. In such a case, even he who has rights, and sleeps upon them, justly loses them."

If there ever was a case to which this language applied, it is the present one. It is in the record, as we have pointed out in considering the position of the patent in the commercial art, that Mr. Vandenburgh's alleged invention never had any extent of use whatever, and was, in the language of this Court, *a failure;* and only after collapsibility was provided was it possible to sell the so-called spirals and spacers in assembled condition; and it is stipulated that this provision *was made by the defendant.*

Furthermore, it is plain from the face of the patent itself that the structure of Figure 4 upon which the claim of infringement is now based was intended for a beam, and that the only

column which the inventor had in mind at all was *not* like Figure 4. See page 21, this brief. There is nothing in the record to show the use of *defendant's* construction for beams at all; as a matter of fact, it is not available for them. It is available for column hooping, and for nothing else. Under these conditions, the long delay in applying, even if the plaintiff had rights, renders the reissue wholly improper and void. We are here considering the mere question of time, not laches.

II.

But the reissue is also void for laches in applying. We have already quoted from the oath which the inventor filed on July 1, 1916, nine years and five months after he had obtained his letters-patent. The use of the word "rigid" in claims 1 and 2 to characterize the structure was obvious upon "taking the patent out of its envelope." It required only the most ordinary intelligence to appreciate the fact that "rigid" and "permanent" were not the same thing; and indeed, that a structure described as "permanent" was a wholly different thing from one described as "rigid". The Obelisk in New York's Central Park is substantially rigid, and cannot be subjected to deflection without rupture; the great steel towers in New York are permanent, but by no means rigid, as they sway several inches in a windstorm, or curve from morning to noon and night on a hot summer day. Anyone

who pretends to a knowledge of engineering is familiar with these facts, and knows the difference. The inventor is clearly chargeable with laches from the time that his original letters-patent issued up to the time of his application for reissue, since the public, the third party in every patent litigation, was entitled to suppose that he had dedicated to its service the "permanent" fastening which he now seeks to monopolize, if that had been of his invention. We have shown that it was not.

III.

But if this were not so, he is certainly chargeable with notice from the time that this "rigidity" was directly called to his attention. On page 21 of the Transcript, in his own deposition (taken in 1918) in the suit against the Electric Welding Company and introduced here by stipulation, he said:

> "Q. When did you find out that that defect existed in your original patent?"

(The question immediately previous made plain that rigidity was the "defect".)

> "A. *I found out several years ago;* but I never have taken it up in a place where it should be taken up and go ahead with it.
> Q. 30. What do you mean by several years ago? Does that mean two or three? A. Well, I first made a study of it trying to get it on the market after the earthquake in

> San Francisco. I went to Washington, D. C. and got there on the 21st of July, 1906, right after the earthquake. The final patent papers were delivered to me on the 7th of January." (This is a stenographic error; it was the 22nd.)
>
> "Q. 31. Then at that time you discovered that the claims had in them the word 'rigidly'? A. Not at that time—well, no.
>
> Q. 32. When did you discover that? A. In 1909, along about that time.
>
> Q. 33. You then discovered they had in them the word 'rigidly'? A. Yes, I got that from a concrete engineer in looking them over."

And from 1909 to 1916 he made no move to correct the alleged error. "The pretense in this case, that there was an inadvertence and oversight which had escaped the notice of the patentee for fifteen (seven) years, is too bald for human credence."

> *Miller* v. *Bridgeport Brass Company, supra.*

But in spite of that, he asserts in his oath, Transcript, page 122 (124), that

> "With respect to claim 1 that he has claimed as his invention *more* than he had a right to claim as new; that *as soon* as said errors came to his knowledge and attention, he applied for this reissue."

The inventor is an elderly man of no great education, and probably signed whatever was put before him without investigation, possibly

with no adequate comprehension of its meaning. This does not, however, lessen the force of the improper statements contained in the oath, or make that true which on its face, and on his own admission upon the stand, was false when signed, was false when the Patent Office acted on it, and is false now. A reissue obtained by a falsehood (which can hardly be held to be legally unintentional) ought not to stand.

IV.

But the reissue is certainly void because claims 1 and 2 are for an invention different from that of the original and so every court which has dealt with the case has held.

It is not our contention that claims in letters-patent may never be expanded by reissue. It seems just as proper to expand them as to contract them, if that be necessary to express the true meaning of the invention, and does not run into the prior art or interfere with intervening rights. But that is not this case.

Here the plaintiff had letters-patent specifying distinctly a *rigid* connection between the coil and the spacer; a connection of such character that the structure was, in his own language, "*a truss* within the body of concrete." The fact is the use of the one word "truss" ought at once to demonstrate the absurdity of the conclusion reached in this case that a *collapsible* structure could infringe a patent for a "truss", or was an "improvement" upon such a struc-

ture. It is a radically different structure, embodying a different idea of means, and serving utilities entirely outside of the scope of the truss.

Every engineer knows that in the design of a bridge the material is arranged in a series of connected triangles, each pair having a common side, called a "truss," spanning an opening. The triangle is selected because of all the polygons it is the one in which the number of members is least; as a consequence of which, it is impossible to change the shape of a triangle without changing the sizes of its members, which is true of no other geometrical figure. As a secondary consequence and one of ultimate importance in the construction of ironwork, a structure composed of triangles *is stiff, remains stiff, and cannot be deformed without rupture.* This is the characteristic of the bridge "truss," spanning an opening; and naturally enough it occurred to the mind of the competent patent solicitor having Mr. Vandenburgh's application in charge, since what the inventor had devised was a beam for spanning an opening. Naturally enough he used the word "truss," which describes what must be employed to span an opening of any size, as illustrative of the structure intended, since the two were identical.

Now a *collapsible* truss is unthinkable. No sane engineer would provide such a structure, nor is it possible as a fact so to arrange a truss as to make it collapsible without destruction. *If it collapses, it is not a "truss". If it is a "truss" it will not collapse.* If an inventor calls his structure a "truss," he accepts the

conclusion that it is *not* collapsible; and he, accepting claims with an implication of rigidity, and much more with a direct specification of rigidity, accepts also the direct specification and the implication that the structure *cannot collapse,* and that a collapsible structure is *not within the terms of the claim.*

Therefore when he applies for a reissue and alters his claims so that they no longer contain either the direct specification or the implication of rigidity, he has demonstrated beyond a peradventure that he is applying for protection for a different thing from that which was contained in his original letters-patent; and so all the courts have found.

Judge Hough, page 138, Transcript: D. C.

> "Turning to the reissue it is found that claims 1 and 2 originally called for a spiral coil 'rigidly secured' to the reinforcing bar; as reissued the phrase is 'permanently secured'. * * * In result, it is held that the reissue was unlawful as to claims 1 and 2 if 'permanently secured' differs in meaning from 'rigidly secured' because the specification meant 'rigidly secured'; whether this invalidates the reissue need not be discussed."

And further, page 137, Transcript:

> "This is Vandenburgh's invention; he never disclosed collapsibility; what he shows will not collapse."

Judge Orr, Appendix C, page 122: D. C.:

> "The structure of the patent is not collapsible. The quotations above indicate it. If the integral spurs are *forced* down upon the coils and *permanently* retain them in position there can be no collapsibility," (Judicial italics.)

Page 124:

> "• • • Being satisfied that collapsibility was not a feature of the device of the first patent, the Court is equally satisfied that if collapsibility may be found to be disclosed in the reissued patent, then the reissued patent was broader than the original and should not have been granted."

The learned Judge obviously meant that the reissued patent was for a different invention, as was certainly the fact.

Judge Buffington, 263 F. R., 99: C. C. A., Appendix C, page 130:

> "It is quite evident that he (Vandenburgh) was not entitled to the broad claims of the generic type which he secured on the reissue of claims 1 and 2. Kerf and overlapping spurs are not embodied in these claims, and it is manifest that these claims, unrestricted by the limitation of kerfs and spurs, were only added nine years after his patent was granted, to make infringers of those who used other forms of attachment • • • "

Judge Westenhaver, Appendix C, page 133, D. C.:

> "In view of * * * the further fact that all the judges who have heretofore considered and passed on claims 1 and 2 have held them to be invalid because too broad, I shall adopt their conclusion without further statement of my reasons than to say that I fully agree both in the conclusion reached and the reasons given to support it."

Judge Knappen, 277 F. R., 345 (346): C. C. A., Appendix C, page 143:

> "The claims of the original patent, which were replaced by claims 1 and 2 of the reissue, in terms call for a rigid fastening. The omission of the requirement of rigidity in claims 1 and 2 was apparently intended to cover the feature of collapsibility found in later devices. Claim 1 of the reissue is unwarrantably broad."

Judge Hough, page 138, Transcript, says:

> "The evidence makes it plain that this change was made to catch manufacturers like defendant."

Judge Ward, this case, Transcript, p. 151: C. C. A.

> "Both courts (District) held that the original patent did not *contemplate collapsibility* of the structure because the spiral coil was described as *rigidly* fixed by kerfs and spurs on the reinforcing bar. For this reason it

was held that claims 1 and 2 of the reissue which were intended to cover collapsibility of the structure were *invalid* as too broad. We agree in this conclusion."

V.

The reissue is invalid because of the attempt to re-appropriate the third claim, repeatedly rejected while the original application was in the Patent Office. This is one of the claims upon which this defendant has been held; and it is an instructive commentary upon the accuracy of the decision below that this claim has been construed to have *exactly the same scope and meaning as the reissued claims* 1 *and* 2, which were changed to "catch manufacturers like the defendant"; and these were changed, as we will show when we consider estoppel, after correspondence with the defendant had asserted non-infringement of the original letters-patent, and after that view had been *acquiesced* in by surrendering the original letters-patent and having it reissued; and "were intended to cover collapsibility."

We have just quoted what the Circuit Court of Appeals in this case said.

Ordinary attention to the meaning of language deliberately used in a judicial opinion would have made it impossible to hold infringement in this case. The thing that was agreed to was that the "*original patent* did not contemplate collapsibility," and that the claims which were changed to cover *collapsibility* were invalid as

too broad. It was not some special set of words in the patent, but the *whole patent itself*, which "did not contemplate collapsibility." If that was so, how then could some other claim of the patent properly "cover" a collapsible structure?

The Court proceeds:

> "But claim 3 of the reissue is literally the same as claim 3 of the original patent"
> (This statement is untrue, as a comparison of the claims presently to be made will demonstrate)
> "and claim 5 of the reissue is literally the same as claim 4 of the original patent. These claims should be construed consistently with the specifications, which are also literally the same in each patent, as *meaning*"
> (We ask particular attention to the following expression)
> "that the spiral coil *is rigidly connected* with the longitudinal bar at each point of contact. So construed the *claim describes a continuous spiral rigidly and integrally connected with kerfs and spurs in the bar constituting a truss-like structure within the body of the concrete*" etc.

This is the Court's definition of the invention —"a continuous spiral rigidly and integrally connected * * * constituting a truss-like structure." The attempt to cover that by claims 1 and 2 was futile, because they covered collapsibility; and the claims were held to be "too broad". But by what process of reasoning can it be held that *a collapsible structure* is within a claim which must be "construed" as

describing "a continuous spiral *rigidly* • • • *constituting a truss-like structure*"?

The fact is these words are a *reductio ad absurdum* of the holding that a collapsible structure was contemplated or covered by the patent, as all courts have held it was not, and as we think plaintiff has stipulated. The Court defines the invention so as absolutely to exclude the defendant's structure; and then holds that nevertheless the patent is valid, and covers it! It is a perfect example of a *non constat.* Clearly the reissue is void, because of the attempt to appropriate that which had been devised by others since the original letters-patent were issued.

Turning now to the file-wrapper of the original letters-patent (an abstract of which as Defendant's Exhibit B begins on page 115 of the Transcript), we find that when the application was filed on May 9, 1906, it contained the following claim (page 116):

> "3. A reinforcing bar provided upon *one edge* with a series of kerfs and integral spurs, and a spiral coil disposed in said kerfs and retained by said spurs."

This claim was *rejected.*

September 27, 1906 (page 116), the claim was amended into the following form:

> "3. A reinforcing bar provided upon *one edge* with a series of kerfs and integral spurs forming an enclosing wall thereof, and a spiral coil disposed in said kerfs and retained by said spurs."

This was rejected for the second time. On October 30, 1906, this claim was *cancelled*, and the following claim was inserted (see page 47, Transcript, for the text of the original letters-patent as issued):

> "3. A reinforcing bar provided upon *one end* with a series of kerfs each having an integral overlapping spur, and a coil disposed in said kerfs, each convolution thereof being retained beneath one of said spurs."

When the application for reissue was made the change of the word "edge" to "end" was asserted to have been one of the "inadvertences or mistakes" justifying reissue; but this is one of the cases which come under definite rulings of this Court to the contrary. It is not permitted for an inventor to re-assert a cancelled claim, and this Court has ruled that where a claim has once been cancelled there is no remedy; that, if the inventor wishes to contest the point and insist upon the claim, he should appeal, as if it were once cancelled it could no longer be held to be an inadvertence, accident or mistake.

Before citing the cases, however, we point out that the substitution of "end" for "edge" in this particular claim made a wholly new and different combination of it. If the word be "edge", then the extent of the structure would be unimportant; but if the word be "end", then obviously there must be two ends to such a thing as a beam, and while the description in the claim might refer to one "end", there must be another "end" also; and that also must be ar-

ranged, as the patent points out, to make the turns extend in the opposite direction from the first end; in other words, if it be applied to Figure 4, it would be understood that Figure 4 was made *like Figure* 1, with the turns of the coils pointing in opposite directions, as this would be a structure with two "ends". See Scheme of the Patent," page 27, this brief.

In

Leggett v. *Avery,* 101 U. S., 256,

this Court said:

> "It not unfrequently happens that, after an application has been carefully examined and compared with previous inventions, and after the claims which such an examination renders admissible have been settled with the acquiescence of the applicant, he, or his assignee, when the investigation is forgotten and perhaps new officers have been appointed, comes back to the Patent Office and, under the pretense of inadvertence and mistake in the first specification, *gets inserted in the reissued patent all that had been previously rejected.* In this manner, without an appeal, he gets the first decision of the office reversed, steals a march on the public, and on those who before opposed his pretensions (if, indeed, the latter have not been silenced by purchase), and procures a valuable monopoly to which he has not the slightest title. We have more than once expressed our disapprobation of this practice. As before remarked, we consider it extremely doubtful whether a reissued patent can be sustained in any case where it contains

claims that have once been formally disclaimed by the patentee, or rejected with his acquiescence, and he has consented to such a rejection in order to obtain his patent. *Under such circumstances, the rejection of the claim can, in no just sense, be regarded as a matter of inadvertence or mistake.* Even though it was such, the applicant should seem to be estopped from setting it up on an application for a reissue."

This case has been cited with approval in many other decisions in this Court. For example, in

Mahn v. *Harwood,* 112 U. S., 354,

the Court approved of *Legget* v. *Avery* in the following language; and also said later at the end of the majority opinion:

"Thus in *Leggett* v. *Avery,* 101 U. S., 259, the reissued patent embraced a claim which had been presented on the application for the original patent and rejected. It was apparent, therefore, that the omission of that claim in the original was not and could not have been the result of inadvertence, accident or mistake, but was the result of design on the part of the Commissioner and acquiescence on the part of the patentee; and so far as that claim was concerned the reissued patent was properly held to be void."

* * * * * * *

"The specification is very plain and free from complexity and, as we have already stated, the claims in the original patent

were clear and explicit. There was no ambiguity and nothing to prevent the patentee from seeing, at once, on inspecting his patent, whether his whole invention was claimed or not. *We can see no possible excuse and none has been attempted to be shown, for allowing the patent to stand the length of time it did without any attempt to have it amended.* The reissue was made against law apparent on its face, and nothing is shown in the record to remove this illegality. The case is clearly within the principle laid down in *Miller* v. *Brass Co.*, and the patent must be regarded as void so far as the new and expanded claims are concerned."

See also similar language in

Shephard v. *Kerrigan*, 116 U. S., 593;
Corbin v. *Eagle Lock Co.*, 150 U. S. 38.

VI.

Estoppel.

Even if all this were not so; even if the reissue were a reasonable one obtained in apt time and correcting what are really legal errors subject to the statute, yet it is not proper or reasonable to enforce it in this case against this defendant, by reason of the estoppel from intervening rights, as set out in the correspondence found in Defendant's Exhibit D, beginning on page 125, Transcript.

The gist of this is that plaintiff, learning that the defendants were making column hooping in substantial quantities and asserting that this was an infringement of his letters-patent, wrote to the defendant representing that it infringed. Defendant took up the matter with its counsel, Mr. Varney, and after study of the patent replied through Mr. Varney that it did not infringe, its view being expressed on page 128 as follows:

> "It would seem to me" (defendant's president) "that the patent would be limited to the combination of a spiral *attached rigidly* to a reinforcing bar.
>
> The spirals which we manufacture are made by a combination of coils of wire attached to an angle, which is slotted on one leg. The spiral is *not rigidly attached,* as it is made collapsible. The angle or spacer is used simply to stiffen the spiral until it is embedded in concrete. In other words the angle is simply a mechanical device used to hold the spiral in place until the concrete is poured. The angle, however, is not figured as a reinforcing bar and the metal used in the angle does not enter into the figured stresses of the column."

This letter was written May 23, 1916; the correspondence was a flat repudiation of the claim of infringement upon the very ground that the original letters-patent *covered a stiff structure,* and that what defendant made was *collapsible.*

Later, a copy of Plaintiff's Exhibit 7, Transcript, page 52, was sent to the defendant, who referred it to its attorney (see page 130) saying:

"You will note he shows a column collapsed and also shows a spiral column in which a T section is used for a spacer. This apparently would *not be in accordance with the patent,* which calls for a reinforcing bar with the spiral rigidly attached. The T spacer is used simply as a spacer and a stiffener", etc.

Later defendant's president learned that the patent had been reissued, and again consulted counsel, in November, 1916; and on January 9, 1917, received a further notice of infringement of the reissued letters-patent, the application for reissue of which had been hastily prepared *immediately after this correspondence,* which terminated in June, 1916; the application being filed on July 1st, and sworn to on the 24th of June, twelve days after the termination of this correspondence: allowing for five or six days in mail transit to San Francisco, about one week after. The application left San Francisco for Washington within a few days of the receipt of defendant's letter.

Under this state of facts, how can it be maintained that the plaintiff is not estopped to assert a construction of his reissued patent different from that put upon the original? If the two claims 3 and 5 bore the interpretation which the Court of Appeals has put upon them in the original patent, why did he not come back at once to defendant and say that it was *mistaken,* and submit his difference of opinion to the court? If he had sued upon his original letters-patent and had asserted of it, as he asserts of it now, that it covered the defendant's structure,

then a fair issue would have been drawn and if defendant lost, it should pay; but to omit to sue then and to sneak back to the Patent Office with the two fraudulent claims Nos. 1 and 2 designed "to catch manufacturers like the defendant" (which every court considering them has held to be void for the fraud) is a competent admission that the view of the defendant was correct. The surrender of the original letters-patent with the lying oath was an acquiescence which this Court should not permit him to set aside.

There is a clear estoppel *in pais.*

Is Not the Whole Reissue Void for Fraud and Perjury?

In general, it is unjust to an inventor to deprive him of that which he has actually invented because of any mere error of procedure. But this is not such a case. Here the plaintiff, knowing that a great industry had arisen without help from him, which repudiated his claim of infringement, pointing out that he had for many years had the patent containing the assertion of rigidity, while what manufacturers made was collapsible, goes back to the Patent Office with the deliberate falsehood that he had not intended to restrict himself to rigidity; and the additional falsehood that he had asked for the reissue "as soon" as he found that his original letters-patent did not cover what he was now asserting it covered; and obtains *ex parte,* within six weeks of its filing, a changed docu-

ment covering what had never theretofore been claimed. Every tribunal which has passed upon it has held that the claims 1 and 2 so obtained, for the purpose of covering a collapsible coil, were void because not for the plaintiff's invention as described in the original letters-patent.

Under much less provocative circumstances in two different cases, the Circuit Court of Appeals for the Seventh Circuit has held that the jurisdictional requisites of an application for reissue were not present, as there was no inadvertence, accident or mistake, and therefore *the whole reissue* (including original claims) was void. The two cases are

General Electric Company v. *Richmond Railway Company,* 178 F. R., 84

and

McDowell v. *Ideal Concrete Machine Co.,* 187 F. R., 815.

The Circuit Court of Appeals in this present case relied on an expression of this Court in

Gage v. *Herring,* 106 U. S., 640,

which it interpreted to mean that claims of an original patent brought forward into a reissue might not be invalid, although the new claims of the reissue were.

It is only necessary to point out that no statement to the effect indicated was made in *Gage* v. *Herring.* What the Court there said was:

> "The new claim in the reissue being invalid and, the defendants not having infringed the entire combination set forth in the repetition of the old claims, the decree below can neither be upheld upon the new claim, nor modified so as to apply to the other claim, but must be reversed and the case remanded with directions to dismiss the bill."

So also in

Mahn v. *Harwood,* 112 U. S., 354,

the Court said:

> "As this leaves only the fourth claim to be considered, and as it is clear from the evidence in the case that the appellant did not infringe that claim, the decree of the Circuit Court must be affirmed."

Yet this Court has never seen in these cases the doctrine announced by the Circuit Court of Appeals in this; because in

Eby v. *King,* 158 U. S., 366,

this Court referred to *Gage* v. *Herring* in a case in which it held that the reissue was void *as a whole.* This is more important because the patent in that case was reissued under the old form of Section 4916, on which the original letters-patent were cancelled on surrender whether the reissue was granted or not; a situation remedied by the clause since introduced into the statute rendering the surrender effective only upon

the actual grant of the reissue. Obviously, this Court under those conditions would do all that it could to save to the inventor any claims contained in his reissue which were found in his original patent, in the absence of fraud or misrepresentation; yet in that case, the whole reissue was declared void.

We think that under circumstances where there is no fraud, no misrepresentation, no attempt to blackmail manufacturers by claims which cover what they are doing when the original did not, but only a *bona fide* attempt to cover what the inventor believed himself to have invented, claims brought forward into a reissue from an original patent should be sustained if that is reasonable; but they should not be given an interpretation which is *identical with the natural meaning of broad claims* in the same document, which are held by the Court to be invalid because not for the same invention as the original letters-patent.

That is what the Circuit Court of Appeals has done in the instant case; and this although the inventor lied when he went to the Patent Office, and falsely represented that he had just ascertained that his patent was too narrow; and although this lie was told for the purpose of dominating the present defendant's structure by new claims, after the plaintiff by his application for reissue had acquiesced in the defendant's contention that it did not infringe the claims of the original patent.

It may be noted that the specification of the original and that of the reissue are identical, *verbatim et literatim.* There was therefore no inadvertence, accident or mistake in the description of the invention; as the drawings are also identical, though on a reduced scale, it is plain there was no mistake there.

The oath to the reissue application (Transcript, page 122) is extremely confused in its use of the word "specification"; at one place making it both the specification, technically so-called, and the claims, and in another place distinguishing between the two; and not a word of excuse for nine years of delay is given. But it is clear that when both the description and drawings in the reissue and original are *identical,* there is but little support for the statement that there was any misapprehension on the part of the counsel preparing the claims. The language of this Court in

Eby v. *King,,* 158 U. S., 366

("Under the rulings of this Court, it is clear that this reissue *cannot be* supported. Not only was there *no claim of a defective or insufficient specification,* none that the patentee had claimed as his own invention *more than he had a right to claim as new,* none of inadvertence, accident, or mistake, but, four years after the original patent was issued, the patentee attempts to secure a reissue, with claims broadened for the purpose of covering that which is presumed to have been once abandoned to the public. *All that has ever been said by this Court in restraint of the practice of reissuing pat-*

> *ents applies with full force to this case. White* vs. *Dunbar,* 119 U. S., 47, 7 Sup. Ct. 72; *Ives* v. *Sargent,* 119 U. S., 652, 7 Sup. Ct, 436; *Dunham* vs. *Manufacturing Co.,* 154 U. S., 103, 14 Sup. Ct. 986,")

applies very definitely to the present case, which seems to us to be clearly one in which the whole reissue should be held invalid on account of fraud and misrepresentation to the Patent Office, and on account of a fraudulent attempt to dominate that which had been devised by others without assistance from the plaintiff's patent; to dominate and appropriate

> "a construction independently worked out by this defendant and particularly without any knowledge of plaintiff's patent or of plaintiff's alleged invention and as a natural and obvious means of securing the spiral to the longitudinal."

(Transcript, page 133.) That is the plaintiff's own stipulation, which ought to put him out of court at once.

INFRINGEMENT.

If the Court shall be of opinion that the original letters patent were invalid for anticipation; or for want of invention in view of the prior art; or that any of the defenses based upon the reissue should be sustained; or that the plaintiff is estopped to assert against this defendant the construction of its patent now insisted upon; then it is unnecessary for it to consider this part of our Brief, which deals solely with infringement.

Infringement.

I. CLAIMS DECLARED INFRINGED ARE NOS. 3 AND 5.

NO INFRINGEMENT BECAUSE VANDENBURGH STRUCTURE IS RIGID AND DEFENDANT'S IS COLLAPSIBLE.

II. VANDENBURGH (CLAIM 5) SLANTS HIS KERFS IN OPPOSITE DIRECTIONS FROM CENTER OF BAR, TO OPPOSE STRAINS. DEFENDANT'S KERFS ARE ALL IN SAME DIRECTION.

What we say about infringement is inevitably bound up with the scope to be accorded to the patent, in connection with the interpretation which the Court must put upon it in view of the prior art; and in view of the conduct of the case in the Patent Office; and in view of the difference between the original letters-patent and the reissue; and in view of the interpretation put upon the claims in the opinion of the Circuit Court of Appeals and its failure to see that the interpretation which it put on claims 3 and 5 gave them the same meaning which it held rendered claims 1 and 2 invalid.

It seems elementary that a patent claim can have, so far as one suit and one structure is concerned, but *one* interpretation. It is not, as once was pointed out by this Court, a "nose of wax" which can be twisted to mean one thing in one part of the case, and something else in another. If the claim has a broad interpretation, then anything within that scope which antedates the inventor is a sufficient invalidating reference. If, on the contrary, it has a narrower interpretation, then while those matters might not inticipate they are still relevant as showing a want of invention; and have an important bearing upon the question if infringement, which is rendered much more difficult of proof.

The fact is that Mr. Vandenburgh never at any time either invented or disclosed what is now known in the art as "column hooping". Therefore, *we use nothing he devised.* While his case was pending in the Patent Office, the patent to McClure, page 94, Transcript, was also there pending; and the patent to Barnes, page 100, Transcript, was filed about five weeks before that of Mr. Vandenburgh. McClure shows *the modern form of column hooping,* which has gone into extensive use; and he, and not Vandenburgh, might have made claims covering that structure, if it had been new. He was satisfied with restricted claims of a rather peculiar character. Barnes does not show, strictly, column hooping; but he does show a column reinforce with *the same form of kerf and spur* as Vandenburgh.

For many years before these applications were filed, it had been a rule of the Patent Office,* that where two or more inventors disclose the same structure, which in the opinion of the Examiner is patentable, the Primary Examiner would formulate claims which can be made by all of the parties, and would suggest these claims to the parties for an interference. This course has been followed in hundreds of cases; and literally thousands of claims have been suggested by the experts of the Patent Office to settle the question of priority of invention. It is instructive that in the present case the McClure patent, the Barnes patent, and the Van-

* "96. Whenever the claims of two or more applications differ in phraseology, but relate to substantially the same patentable subject-matter, the examiner, when one of the applications is ready for allowance, shall suggest to the parties such claims as are necessary to cover the common invention in substantially the same language."

denburgh patent, were all *co-pending* applications, and that the Examiner, the recognized official expert in this art, did not see that there was any interference between them. He suggested no claims to McClure and Vandenburgh; because, while McClure showed and claimed column hooping, Vandenburgh did not. He suggested no claims to Barnes and Vandenburgh to cover the alleged invention of the kerf and spur disclosed by both of them; because obviously he regarded that as *not an invention at all*, and certainly not one which either of those applicants was entitled to monopolize.

So far as the interpretation of the patent along the line of infringement is concerned therefore, it must be conceded, we believe, that Vandenburgh never showed or disclosed to the art column hooping at all; and certainly did not disclose to it a collapsible structure which could be shipped economically. Furthermore, he has stipulated that the structure which the defendant sells was made without knowledge of his patent, was devised by the defendant itself, and was the *"natural and obvious"* way of connecting the coil to the spacer.*

See also the "Scheme of the Patent," found on page 27 of this brief.

In order to bring before the Court exactly what it is that the plaintiff has claimed, we here copy the claims in suit: Transcript, page 50, Reissued patent;

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*We can see no reason why this uncontradicted stipulation is not a complete defense. If this was the "natural and obvious" way of doing things it follows as of course that it was without invention; because that is based on something which is *not* "obvious". Certainly there can be no injustice in holding the plaintiff to his own stipulation.

"1. A concrete reinforcing consisting of a bar *having a plurality of integral spurs*, and a spiral coil *permanently* secured thereto by having the spurs bent down on the several coils, the coils extending beyond and *free of the bar* at the opposite side therefrom to the securing point.

2. A concrete reinforcing consisting of a bar *having integral means* to secure a coil thereto, and a spiral coil *permanently* secured to the bar in each convolution and extended beyond and *free of said bar* at the opposite side therefrom to the securing point.

3. A reinforcing-bar provided upon one *edge* with a series of kerfs each having an integral overlapping spur, and a coil disposed in said kerfs, each convolution thereof being retained beneath one of said spurs.

5. A reinforcing-bar provided upon one edge with a series of kerfs disposed diagonally to the length of the bar each having an overlapping integral spur *projected toward the center of the bar*, and a coil disposed in said kerfs and retained beneath said spurs."

We waste little time on claims 1 and 2. Six courts and twelve judges have declared that they were fraudulently obtained for a different invention from that set out in the original patent. Five courts and nine judges have held that the original claims containing the word "rigid" correctly described *the device* of Mr. Vandenburgh, and only the opinion in this case holds to the contrary by implication only (by a complete *non constat*), after a direct statement restricting him to rigidity.

It has never been contended that the defendant in this case made anything coming within the terms of these two void claims, if they are to be interpreted as covering only a rigid structure. If therefore the Court shall be of opinion that all these courts and judges were right, that will be the end of the case on the question of infringement of claims 1 and 2.

This Court cannot accept without examination the decision of any other court on a matter which is submitted to it; therefore we compare here (very briefly) the claims in suit with their prototypes in the original letters-patent.

Original, page 47.	Reissue, page 50.
"1. In a reinforcing-bar, a spiral coil *rigidly* secured thereto at two points in each convolution thereof and extended beyond and *free of said bar at the opposite side therefrom* to the securing point.	"1. A concrete reinforcing consisting of a bar *having a plurality of integral spurs,* and a spiral coil *permanently* secured thereto by having the spurs bent down on the several coils, the coils extending beyond and *free of the bar at the opposite side therefrom* to the securing point.
2. In a reinforcing-bar, a spiral coil *rigidly* secured thereto at two points in each convolution thereof and extended beyond and free of said bar at the opposite side therefrom to the securing point, *said coils being deflect-*	2. A concrete reinforcing consisting of a bar *having integral means* to secure a coil thereto, and a spiral coil *permanently* secured to the bar in each convolution and extended beyond and *free of said bar* at the op-

Original, page 47.	Reissue, page 50.
ed in opposite directions from the center of the bar toward the ends thereof.	posite side therefrom to the securing point.
3. A reinforcing-bar provided upon *one end* with a series of kerfs each having an integral overlapping spur, and a coil disposed in said kerfs, each convolution thereof being retained beneath one of said spurs.	3. A reinforcing-bar provided upon *one edge* with a series of kerfs each having an integral overlapping spur, and a coil disposed in said kerfs, each convolution thereof being retained beneath one of said spurs.
4. A reinforcing-bar provided upon one edge with a series of kerfs disposed diagonally to the length of the bar each having an overlapping integral spur *projected toward the center of the bar,* and a coil disposed in said kerfs and retained beneath said spurs."	5. A reinforcing-bar provided upon one edge with a series of kerfs disposed diagonally to the length of the bar each having an overlapping integral spur *projected toward the center of the bar,* and a coil disposed in said kerfs and retained beneath said spurs."

The difference in the language of the claims is manifest, as is the difference in scope and meaning. That they cover different inventions we think cannot be gainsaid. For example, take claim 1 of the reissue. Here the attempt is made to dominate *all forms* of integral connection between the helix and the spacer by the phrase "a bar having a plurality of integral spurs." No such statement is made in the original, which says only that the so-called

spiral coil shall be "rigidly secured" to the bar at two points in each convolution thereof. Both the original and the reissue claims contain the phrase "extending beyond and free of the bar at the opposite side therefrom to the securing point," the meaning of which has never been adjudicated. It must mean, we believe, that the coil is "free" from attachment *to anything* at the side opposite the bar; it is true that it says "free of the bar"; but the same bar *could not* be attached to the coil at opposite ends of a diameter. If the coil is "free," then the addition of the second spacer would put the construction outside of the claim, because with that the coil is not "free," but is *secured* on opposite ends of each diameter.

So also with claim 2, which is wholly unlike anything found in the original; the very broad phrase is used, "a bar having *integral means* to secure a coil thereto," and the same expression regarding the coil is used. Obviously, the same considerations apply here. No such scope could be given to the original claim 2, which contains the requirement of rigidity, and also that the coils should be "deflected in opposite directions from the center." The very broad expression "integral means" is not contained in the original letters-patent; and the "integral spur" (on page 1, line 78), is only named as a "preferred" means. This will be sufficient, we believe, to justify the Court in upholding the decisions of the various courts below, which are unanimous to the effect that claims 1 and 2 of the reissue are void because of their being for different inventions from those disclosed in the original.

As to claim 3. This is a re-insertion in the reissue of the original *cancelled* claim 3. The original *cancelled* claim as found on page 116, Transcript, is:

> "3. A reinforcing bar *provided upon one edge* with a series of kerfs and integral spurs, and a spiral coil disposed in said kerfs and retained by said spurs,"

Claim 3 of the reissue, as found on page 50, Transcript:

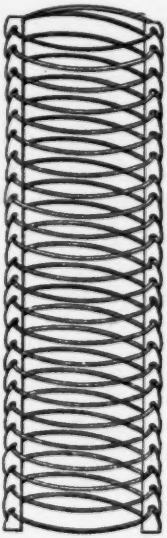
> "3. A reinforcing bar *provided upon one edge* with a series of kerfs each having an integral overlapping spur, and a coil disposed in said kerfs, each convolution thereof being retained beneath one of said spurs."

How can it be contended that these are not the same thing? It is juggling with words to hold that they are different. In view of the specification and in view of the drawings, they are the same.

But claim 3 must be interpreted to mean, according to the entire disclosure, *a stiff structure*, as our Court of Appeals held in this case. It will be noted that Figure 4, the only thing on which the charge of infringement is based, is for a *part only* of the ironwork arranged as in Figure 1. In other words, the complete view of Figure 4 is as below; while nothing in Mr. Vandenburg's original patent or his reissue asserts or suggests that Figure 4 is like the "collapsible spiral" of defendant, shown in Plaintiff's Exhibit No. 5, page 51, in which the coil and spurs extend in the same direction from one end of the structure to the other, as in the contrasting sketch here shown.

Figure 4, Complete.
"Overlapping integral spurs projecting toward the center of the bar." Claim 5.

Defendant's spurs all project in same direction.



Structure

Indeed, we may quote the language of Judge Hough in his opinion, page 135:

> "That this is not the exact thing Vandenburgh invented is too plain for argument; the assertion is that a wire spiral fastened to one piece of metal, such as defendant's 'spacer', in the manner commercially used by defendant, and intended as an aid to concrete building, embodies the claims in suit; the addition of another spacer is immaterial

and collapsibility is a function or attribute of what the claims define."

While this is a much better statement of plaintiff's argument than any he has made, is it not "too plain for argument" that the structure which the defendant makes is *not* the structure of the Vandenburgh patent, by whatever formula of words the latter may be defined? As a question of *things*, and not of words describing them, Judge Hough's opinion is unanswerable.

The Circuit Court of Appeals attached importance to the asserted fact that this claim was contained in the original, saying that it was "literally" the same. That is not true, but whether contained in the original or not, it is plain that it was intended to describe and embody a *rigid structure*, which the defendant does not use; for the Court said (Transcript, page 151):

> "*These claims* (3 and 5) should be construed consistently with the specifications, which are also literally the same in each patent, as *meaning that the spiral coil is rigidly connected* with the longitudinal bar at each point of contact. So construed the claim describes a continuous spiral *rigidly and integrally connected with kerfs and spurs in the bar constituting a truss-like structure within the body of the concrete.*"

It appears to us entirely obvious that the defendant does not use anything which responds to this language, and that the finding of infringement by a collapsible structure, even by calling that an "improvement", is erroneous, under every principle of construction.

Turning now to claim 5, it must stand or fall with the other claims so far as validity is con-

cerned; but it stands on a different basis as to infringement. No court which has considered it has paid attention to its exact language. This describes the connecting spur as "an overlapping integral spur *projected towards the center of the bar.*"

What does that language mean? Unless the defendant's overlapping integral spurs "project toward the center of the bar," whatever that may mean, it is clear it does not infringe. No explanation is given of the phrase in the specification, which is the same in the two patents; but the drawings render plain beyond a peradventure what the language is intended to describe. By consulting Figure 1 of either patent, page 45 or 48, it will be seen that the overlapping kerf lettered 9 (on the left-hand side at the bottom) does as a fact "project toward the center of the bar" shown in Figure 1; and the same may be said of the similar spurs on the right-hand side of the drawing,* and in all the figures.

If that is what he meant, that is, that the spurs 9 "project toward the center" of the reinforcing bar shown as an integer in Figure 1, the structure of the defendant does not do that, since all of its spurs project *in the same direction* from one end of the column to the other. (See the cuts on page 87, this brief.) Equally of course, if Figure 4 does not have that construction, it would *not* be "a detail perspective of the * * * coils shown in Figure 1" as Figure

*There are reference characters 8, 8 given on the drawing for these spurs in Figures 1, 3 and 6; but these are not mentioned in the specification, and we do not know what they designate

3 is asserted to be on page 1 of the patent, line 34, Transcript, page 49; nor would it be "a similar view" (to Figure 3) "of a modified form using one coil" as Figure 4 is there said to be.

But the words must have some meaning. It is a primary rule of construction that every word must be assigned a meaning; and it is clearly applicable to letters-patent of absolute necessity, so that a restriction in one claim may differentiate that claim from others which do not contain it. Therefore, unless the words are to be stricken from claim 5, they must be assigned a meaning. This seems to be the only one which can be given to them.

Summary Upon Infringement.

THEREFORE WE SAY THAT THE DEFENDANTS DO NOT INFRINGE CLAIMS 1 AND 2, BECAUSE THOSE CLAIMS ARE VOID, AND WERE INTENDED, AS OUR OWN CIRCUIT COURT OF APPEALS HAS SAID, TO COVER A COLLAPSIBLE STRUCTURE, WHICH THE PATENTEE DID NOT DISCLOSE; IT DOES NOT INFRINGE CLAIM 3 BECAUSE THAT COVERS A RIGID STRUCTURE ONLY, AS THE WHOLE SCOPE AND TENOR OF THE ORIGINAL PATENT SHOWS, AND AS THE DISTRICT COURT AND COURT OF APPEALS HAVE HELD; IT DOES NOT INFRINGE CLAIM 5 BECAUSE THAT ALSO, CORRECTLY CONSTRUED, COVERS ONLY A RIGID STRUCTURE (AS THE COURT OF APPEALS HELD), AND DIFFERS FROM THE OTHERS BY INCLUDING THE REQUIREMENT THAT THE SPURS SHALL "PROJECT TOWARD THE CENTER OF THE BAR"; WHICH IS NOT THE CASE WITH THE COLUMN HOOPING MADE BY THE DEFENDANT.

ACCOUNTING.

If the Court holds the original letters-patent invalid; or sustains any of the "reissue" defenses; or sustains Judge Hough's conclusion that defendant does not infringe; then it may dispense with reading this section of our Brief, which deals only with the accounting.

Accounting.

Our complaint upon the accounting is that the courts below and the Master have failed to follow the leading decision of this Court,

Westinghouse v. *Wagner*, 225 U. S., 604,

in important particulars.

That case dealt with the doctrine of apportionment of ascertained profits; and laid down several fundamental propositions which may be summarized (not in the language of the Court) as follows:

(1) It must be proved that there have been profits derived from the use of the invention set out in the letters-patent.

(2) If the entire thing which is made or sold is not new, then the plaintiff, or in certain alternatives the defendant, must apportion the ascertained profits into the parts due to the letters-patent and those due to the rest of the structure.

(3) This duty falls primarily *upon the plaintiff*; but if he fails through the inherent impossibility of so apportioning; or fails so to apportion *after proper and adequate effort* so to do; or fails so to apportion by reason of the confusion of accounts *due to some act of the defendant*, then (and then only) the duty falls upon the defendant to make the apportionment; and if he fails, then the total profits are awarded to the plaintiff.

(4) But these profits (either total or apportioned) may be *abated* by another apportionment, for the first time recognized in that decision; that is, between the patented structure as described or conceived by the plaintiff and embodied in the letters-patent, and any improvement which may have been added by the defendant to that structure. In this form of apportionment, the burden is *still upon the plaintiff*, after the defendant has shown that he has made improvements; and if he is unable to apportion by reason *of the act of the defendant*, then the defendant may assume the burden; and if he fails the whole amount of profit will be awarded. But if plaintiff makes *no attempt* to apportion, he fails to sustain the burden of proof, defendant has no duty, and plaintiff gets only nominal damages.

The limiting words used in the synopses of the Court's holdings must be borne in mind. It is not enough that the plaintiff *does not* make the apportionment; he must make proper and adequate effort so to do, and must fail in his effort either because of the act of the defendant, or because of the inherent impossibility of making it, in either of the two kinds of apportionment. Therefore, if a defendant does everything in his power to facilitate the taking of the account, and furnishes every item of information asked for, he has done all that can be required; if the plaintiff then fails, he is entitled only to a nominal recovery.

These principles the Court and the Master have declined to follow. It is sufficient, we believe, to justify a reversal to read the Master's

report, beginning at page 316 of the Transcript, where the Master says:

> "It was the duty of the plaintiff to apportion the profits between those due to the patented feature and those attributable to the unpatented part, or to show that such apportionment is impossible *by reason of the defendant's acts.*
>
> The plaintiff has *made no effort* to work out an apportionment or to show that one was difficult or impossible • • • In connection with a claim for reasonable royalty, the plaintiff has introduced estimates by experts as to the comparative cost of the two methods, showing a large saving by the Vandenburgh method. But these estimates give no basis for an apportionment for the reason that it does not appear what, if any, part of this saving *went to the defendant*" • • •

Mr. White, one of plaintiff's experts, says that *he does not know* who makes the profit, the manufacturer or the contractor.

> "So far as making any apportionment of the profits between the patented and unpatented features is concerned, *the plaintiff has wholly failed to sustain the burden of making such apportionment.*"

Then the Master proceeds to say that having failed to sustain the burden of making the apportionment (indeed he might have stated with correctness, from the evidence before him, pages 162-276 of the Transcript, that the plaintiff had proceeded throughout on the assumption that it was not necessary to prove anything except that

the defendant had made profits), the whole of defendant's profits from the sale of the iron-work containing the alleged infringement was due to the patented construction.

There is not a letter of proof of this in the entire record; the Court will see, from what we have said concerning the commercial use of the actual structure shown in the letters-patent (page 15 this brief) that *no such evidence could be given.* The plaintiff had on the stand, Mr. White, a practical contractor, page 42, and Professor Thayer of Pittsburgh, whom it called as an expert witness, page 58. Neither of these witnesses was asked any question concerning the commercial utility of the Vandenburgh structure, *as outlined in the letters patent.* Neither of them expressed any opinion as to the relative salability of the thing shown in the letters-patent and that made by the defendant. Neither of them attempted to differentiate between the price obtained for the mere iron, without assembly (which obviously could not be influenced by the letters-patent), and that when the iron was assembled in the manner set out in that document. The letters-patent being pure paper and subject to all of its infirmities, are no better than the other similar documents in the record; the comparison is then to be made between the structure shown in the letters-patent, and those shown in others. Every element of the combination shown in the Vandenburgh patent, as interpreted by the Court below, is old and well known, and the assembly of them gave no advantages not equally present in other structures. The statements of Mr. White and the entire fail-

are to contradict them by any evidence on the part of the plaintiff, that *he did not know who* made the profit, if any were made, from the method of assembling; and *did not know* whether the contractor or the defendant manufacturer made the profit from his fanciful figures, are sufficient to show that no profit whatever was gained *from the letters-patent in suit;* certainly that nothing definite is proved.

On the other hand, it is conceded in the stipulation that the controlling advantage of collapsibility (Transcript, page 133) was derived from

> "a construction independently worked out *by this defendant* and particularly without any knowledge of plaintiff's patent or of plaintiff's alleged invention and as a natural and obvious means of securing the spiral to the longitudinal."

There is no evidence in the record (we ask the Court's attention to the difficulty in which the defendant is placed by the fact that it is compelled to say again and again that there is "nothing in the record" on certain points; omissions of proofs are difficult to deal with; it is easy to designate a positive statement, but an entire absence of testimony can only be mentioned) that the rigid or "truss" structure shown in the letters-patent was ever made, used or sold by anybody anywhere; and indeed, the plaintiff has persistently tried to shift its ground in this particular from *what is shown* in the letters-patent to *some other* structure which included collapsibility, although our Court of Appeals has distinctly held that the patent

"did not cover collapsibility." Transcript, page 151:

> "Both Courts held that the original patent did not contemplate collapsibility of the structure * * * for this reason it was held that claims 1 and 2 of the reissue which were intended to cover collapsibility of the structure were invalid as too broad. We agree in this conclusion."

For example, on page 172 of the Transcript, a witness was asked by plaintiff's counsel:

> "Q. 38. You understand what is the subject matter of this case, do you not, *collapsible* spirals? A. Yes, sir, spirals."

And the interrogation proceeded as if collapsibility was *necessarily involved* in the plaintiff's structure, although the ruling of every court which has dealt with that subject is to the contrary, and although the claims which were said to cover collapsibility were held to be *void for that reason* as "too broad".

There is also an entire failure to make the second kind of apportionment between the structure made under the letters-patent, and the improvement which it is stipulated the defendant made (assuming it to use that structure) by making it collapsibile. Of the absurdity of saying that making one structure collapsible is an "improvement" on making another one stiff we have already spoken.

His Honor Judge Mayer(in the second opinion of the Court of Appeals, Transcript, p.

398) was under the misapprehension that because some of the ironwork was not sold *assembled,* collapsibility was not shown to be a requisite of salability; but his Honor failed to realize that the structure is *even more completely collapsed* when sold in that way, since the wire is simply tied in a compact coil, and the longitudinals are wired together and shipped with it, in a separate bundle. Of course, this is "collapsed," even more than when the wire and longitudinals are assembled and then the turns of the wire laid flat.

It is apparent without expert reasoning that if the structure be a stiff cylinder, say, a foot in diameter and fifteen feet long, it takes up a great deal more room and will cost more to ship than if it be in a flat bundle fifteen feet long, one foot wide and three inches thick. It should not need expert deposition to show that this was of the utmost importance and indeed one of the plaintiff's witnesses, Mr. Cummings, Transcript, page 27, has said:

> "Q. 18. The possibility of collapsing the spirals is of considerable advantage in shipping, is it not? A. In shipping, yes."

Yet no attempt was made to show the difference in salability between a structure which could not be collapsed; as shown by plaintiff, and one which could, as made by defendant.

It seems clear that both the Master and the court below failed to appreciate the *right* of defendant to have the accounting proceeded with according to the lines laid down by this Court

in *Westinghouse* v. *Wagner*. The Master has found,

> "The defendant has shown in the proceedings before me no disposition to cause unreasonable delay or in any way harass or impede the plaintiff."

And as the Court will see from the whole of the accounting, defendant has done everything it could to simplify and expedite the case and has made repeated response to calls for information which the plaintiff made, even though they were not ordered by the Master and perhaps might have been resisted.

It was imperative for plaintiff to apportion, then, *first*, between the profit from the sale of the ironwork and the profit from the sale of the same amount of ironwork assembled according to the letters-patent, as compared with assembly by any of the methods shown in the prior art; and *second*, between the profit due to the "rigid" assembly according to the plaintiff's method, and the collapsible assembly invented by the defendant. The Master has found repeatedly that *no attempt* has been made to do any of this; and his conclusion that all of the profit it is due to the patented improvement, so-called, is without competent evidence to sustain it. Allowing for all of the inferences and deductions which can properly be made from what plaintiff has shown, and disregarding anything which the defendant has put into the case, at the close of the plaintiff's case defendant was entitled to a ruling that the plaintiff

had failed to make out a case; because he had failed to show that profits were derived from the sale of the *patented* structure; had failed to show what part of the profits was due to the letters-patent, as apportioned between the iron-work and the assembly; had failed to apportion between the profits due to the patented "rigid" structure, and the collapsible structure of defendant. Plaintiff was entitled only to nominal damages, and must pay (according to *Dobson* v. *Dornan,* 118 U. S., 10), the costs of the inquiry before the Master, including the Master's fee.

Error is also to be found in Judge Mayer's method of determining when all the profit is to be attributed to plaintiff's patent; he says (page 402):

> "The test is whether the invention of the patent in suit gives the whole value to the infringing device. Obviously, it must, in a case where a sale * * * would be impossible without availing of the disclosure of the patent, and, where the additional feature had no relation to the structure, *qua* structure, or to its shipment as such" etc.

We are not sure what that means; *no witness has testified* that a "sale * * * would be impossible" unless infringing. But the test proposed is useless; for *this Court has prescribed another.* In the *Westinghouse case,* the sale would have been "impossible" except for the infringement; yet this Court ordered the case to go back for apportionment between the infringing article, and the added improvement.

Of course, where no sale has ever been made of the structure *without* the improvement of col-

lapsibility, as in this case, Judge Mayer's test fails completely. It is impossible to say that a change which makes a "rigid" structure collapsible is not made in a "structure, *qua* structure." In view of the definition of the invention in the former opinion of the Circuit Court of Appeals which includes rigidity as an element, Transcript, page 151, folio 452, Judge Mayer's analytical mind no doubt had great difficulty in reaching *any* conclusion.

We believe ourselves to be entitled to a reversal of the decree below on the accounting questions alone.

Damages.

The Master allowed no damages, holding that none from loss of sales was proved (page 322, Transcript; "There are no damages from lost sales or reduction in price.") He also held that no reasonable royalty was deducible from the evidence, it being in hopeless conflict; one witness saying $12 per ton, another $8, and other proof showing at most a few cents. No other conclusion is possible. See page 325, Transcript.

A little fuller discussion of some features of the accounting, with citations of decisions, will be found in Appendix D, page 150.

The Law.

A surprising amount of attention has been paid by the courts to the art of reinforcing con-

crete with ironwork designed to strengthen the angles and joints. Forty-eight cases are reported in the lower courts, not counting the decisions on the patent in suit (See list in Appendix B), twenty-five being District Court cases and twenty-three being appeals to the various Circuit Courts of Appeals. Only one case has heretofore reached this Court, so far as we have found; that is

Bone v. *Marion County*, 251 U. S., 134;

the opinion in which was written by Mr. Justice McKenna.

Out of all these contests, the plaintiff succeeded in three cases. In all others, the patent was declared to be void, or else not infringed. One of these successes was neutralized by the decision in the Bone case, a prior decision of the Circuit Court of Appeals for the Sixth Circuit sustaining the patent.

Of the six cases upon the patent in suit, three in the District Courts and three upon appeal, only the appeal in this case has sustained the patent or found infringement.

Therefore it will be seen that the art has been very fully developed and thoroughly thrashed out judicially, the general weight of adjudication being substantially to the effect that the various combinations and improvements patented were either not inventions at all, on account of anticipation or lack of invention, or were of such restricted and specific character that they were not infringed.

One instructive case was *Berger* v. *Trussed Concrete Steel Company* (the predecessor in business of the Truscon Steel Company, respondent in the other case now here on *certiorari*): the decision in the court below was by Mr. Justice Clarke, at that time a District Judge. The case is reported in 257 Fed. Rep., 741 in the Sixth Circuit Court of Appeals, and was decided in October of 1918. Its language is so pertinent to the case now before the Court that we append it. Indeed, we might well enough base the decision of this case upon the two cases now referred to, that is, the *Berger* case in the Sixth Circuit, and *Bone* v. *Marion County* in this Court; the scope of patents in the concrete art must be conceded to be restricted within narrow limits, at least *prima facie*. The decision in the *Berger* case is as follows:

> *Berger Mfg. Co.* v. *Trussed Concrete Steel Co.*, 257 Fed. Rep., 741, 10-10-1918.
>
> W F. GUTHRIE, for defendant.
>
> "It must be conceded that the complete combination specified in the claim is not precisely anticipated, that it possessed commercial utility, that it has gone into considerable use, and—more important than all—that metallic studs or supports and metal lath had been used in combination for a number of years and fastened together in different ways without adoption by anyone of the specific methods of fastening here disclosed. These considerations make strong-

ly in favor of patentability; but we are compelled to think that they are not sufficient to overcome the conclusions necessarily resulting from the state of the art.

It is clear that sheet metal supports in the form of studding or furring had been used to carry perforate metal lathing long before Caldwell's alleged invention. The two had been fastened together by separate wire fastenings and by several other different methods. It is clear, also, from the record that it was *a common expedient* to attach things to be carried by a sheet metal support to that support by cutting out and striking up a prong from the support and then bending it back over the part carried. The record shows that this expedient had been used under a great variety of conditions. One of the older instances of such use of this attachment was to make the fastening between a tubular sheet metal fence post and the supported fence wire. To use this same method of fastening to carry one or two strands of a metal lathing, instead of to carry one fence wire, we think cannot be considered to involve invention. It is as if common wooden lath had always been attached to wooden studding by screws, and some-one observed that to nail them on as fence-boards are nailed to a fence-post made a quicker and better method of fastening. The fact that Caldwell used a support with a flat surface, and thereby got a little better binding effect on both sides of his prong than when the surface was round, cannot turn the scale in favor of the patentee's contention.

The principles involved and the controlling conditions are so familiar and their application is *so wholly a matter of judg-*

ment that it seems unnecessary to go into the question more fully.

The decree is affirmed".

This case, like the one at bar, was on a *reinforcing metal* structure; *not* a reinforced concrete structure, like the *Bone* case, *infra.*

Bone v. *Marion County,* 251 U. S., 134, covered the reinforcing of a concrete retaining wall at the base in such a way as to form a heel upon which the weight of the material to be retained would rest, so that the resultant thrust tending to overturn the wall was counterbalanced; and the reinforcing was arranged to strengthen the joint between the upright wall and the heel which went under the earthwork. The Court's decision is very fully illustrated on pages 137, 141 and 145 of the report. In that case, the Circuit Court of Appeals for the Sixth Circuit had sustained the patent upon a record which did not show very fully what the prior art was; but the Circuit Court of Appeals for the Seventh Circuit reached a different conclusion and held that the patent was invalid on the ground that

> "Bone was not the first to do the things that he asserted he was the first to do, and that whatever the record in the Sixth Circuit might have shown, so far as the record before this Court was concerned the absolute converse of that proposition had been demonstrated".

The Sixth Circuit Court held that

> "It is also in evidence that there has been a large sale and general acquiescence in the Bone patent".

Under these circumstances, this Court took up *de novo* the whole subject, discussed the prior art and held the patent to be "a step, not a leap" in the progress of the art; and commenting (see p. 144 of the opinion) upon the prior art, said:

> "To execute theories by adequate instrumentalities may indeed be invention, but an answer to petitioner's contention we have given by our comment on the • • • publications and the fullness of their expositions. *Bone may have been ignorant of them and his device may not have been their suggestion.* They seem to have been unknown to American engineers, not even the interest of the controversy in the Sixth Circuit having developed their existence. From this local ignorance nothing can be deduced favorable to the patent".

And the Court held that these foreign publications, though wholly unknown and uncirculated here, nevertheless were within the terms of the statute and therefore deprived the Bone structure, if not entirely of novelty, at least of any substantial scope.

That is a close analogy to the case now before the Court, though there is an important difference which makes in favor of the present defendant. That is that the prior art publications and the prior patents, all in English, all in our own country, except the Hyatt English patent and the Kieserling German patent, were fully in evidence in this case, and constitute practically the same record as that upon which the Sixth Circuit Court of Appeals declared this

patent to be invalid; and that after a full discussion and consideration, which they did not have in the case at bar, though in the record and presented to the Court.

Justice Story a hundred years ago, in

Earle v. *Sawyer,* 4 Mason 1, F. C., 4247

characterized the course of reasoning to be applied in patent cases (and which unfortunately is not always applied) as follows:

> "It did not appear to me at the trial, and does not appear to me now, that this mode of reasoning upon the metaphysical nature or the abstract definition, of an invention, can justly be applied to cases under the Patent Act. That Act proceeds upon the *language of common sense and common life,* and has nothing mysterious or equivocal in it".

Bearing this in mind, we think it cannot but be held that the present so-called invention was but the selection from the common expedients of the ironworking mechanic, and then assembling the parts in the relation in which they had theretofore been used; so that to it applied the language of this Court in

Hollister v. *Benedict Co.,* 113 U. S., 59,

where Mr. Justice Matthews said (p. 73):

> "It is but the display of the expected skill of the calling, and involves only the exercise of the ordinary faculties of reason-

> ing upon the materials supplied by a special knowledge and the facility of manipulation which results from its habitual and intelligent practice; and is in no sense the creative work of that inventive faculty which it is the purpose of the Consititution and the patent laws to encourage and reward".

Or to use the language of Professor Robinson in his well-known work on the patent law (Section 78):

> "The mental faculties employed in the inventive act are the *creative,* not the *imitative* faculties. An invention is the product of original thought. It involves the spontaneous conception of some idea not previously present to the mind of the inventor. Industry in exploiting the discoveries and acquiring the ideas of others; wise judgment in selecting and combining them; mechanical skill in applying them to practical results; none of these are creation, none of these enter into the inventive act".

The application of the principles thus laid down to the case before the Court is too apparent to need extended explication. We have only to refer to the drawings which we have prepared for the Court to see at once that there is *nothing of novelty* in any part whatever of the so-called "invention"; that it is a selection of well-known things, each acting in precisely the way in which it has acted before; that each part of the group is applied to precisely the same situation as that from which it was taken; that *no new result whatever* is obtained by the

so-called combination of the various parts of the alleged "invention".

Indeed, we may go further, and by referring to the other letters-patent found in the record, show that not even the restricted idea which the Examiner was willing to allow (see page 27 of this brief, "Scheme of Patent") had any incident of novelty. Even the very tilting of the coils away from the center, the bringing of the strain upon them in opposite directions so that they balanced one another, was *not new;* see Pohlmann, page 71, Transcript; Kahn, page 74; Peabody, page 78; Golding; page 81; Maxwell, page 97. Drawing No. 1 shows that the helix or so-called "spiral" coil was thirty years old before this patentee saw its utility; that the longitudinal or spacer was old in many relations is shown clearly by Drawing No. 2; that *many forms* of "integral attaching means" for the coil and the longitudinal, including the very kerf and spur upon which so much stress has been laid, were old and well known, both in the concrete art and in the metal working art, is conclusively shown by Drawing No. 3. The sources from which these "common mechanical expedients" are drawn are plainly shown in the other drawings; what the patentee did was solely to benefit by the previous ingenuity of other men; to select only. Selection is not invention.

Now that under some circumstances might be invention. If there be *a new result* accomplished by the putting of the things together in that special way; or if the improvement is such that what is done is accepted and drives out other

devices in the art and goes into use,—is paid for, in the other words—that might be invention. But that must be apparent *from the record* before any weight can be given to the allegation; and the evidence must show that the thing which was done was due to the letters-patent in suit, and not independently conceived and executed by someone else; it must be shown that it is *the thing which the patentee devised,* and not some improved form or a somewhat similar device, which has gone into use. "In the law of patents it is the last step that wins", says Judge Coxe in one of his well-known opinions. So it is in the commercial exploitation of any device. The record shows that what Mr. Vandenburgh did *never went into use* anywhere, and so far as the present record is concerned, there is no evidence that the structure which he sketched ever was built by anybody, anywhere. Assuming for the sake of argument that what defendant did was derived from it (which the plaintiff himself has stipulated was not the case), that is not enough; because the alteration of it, the making of it collapsible, was the "last step" which turned it from a futile thing too bulky and clumsy for shipment to a commercial article. That was *due to the defendant,* and to nothing derived from plaintiff's patent.

Costs.

Ordinarily, the question of costs does not come here; but, as in the Consolidated Gas case, it is proper to refer to it when the case is other-

wise in this Court.

Section 973 of the Revised Statutes of the United States* provides that no costs shall be allowed the plaintiff if any part of his patent covers matter not belonging to him, speaking colloquially. This has uniformly been interpreted to mean that no costs shall be allowed if any of the claims is declared to be void. Claim 1 and 2 of the reissue have been declared void by every court that has passed on them. They have never been disclaimed, although invalidated five years ago. In spite of this provision, the court below allowed half costs in the original case, which we have had to pay; and has compelled us to pay the Master's fee in this case. If this court shall be of the opinion that the bill below should be dismissed, we ask such an order as may be appropriate under these conditions; and in any event, we are entitled to a refund of these costs.

No court has ever discussed fully the question whether a plaintiff who succeeds on one claim is entitled to the same recovery as one who succeeds on all the claims of his letters-patent. In the instant case the plaintiff has succeeded on two claims only out of seven; one of these claim 5, by clear inadvertence, since regardless

* "Section 973. When judgment or decree is rendered for the plaintiff or complainant, in any suit at law or in equity, for the infringement of part of a patent, in which it appears that the patentee, in his specification, claimed to be the original and first inventor or discoverer of any material or substantial part of the thing patented, of which he was not the original and first inventor, no costs shall be recovered, unless the proper disclaimer, as provided by the patent laws, has been entered at the Patent Office before the suit was brought."

of any other consideration the defendant's structure does not respond even to the terms of the claim. Practically, therefore, he is given the entire profit of the defendant (who is not allowed to recoup his losses from the same branch of the business, as good accounting would require) for the infringement of one-seventh of the letters-patent. If all the claims had been infringed, would the plaintiff have been entitled to seven times the total profit?

Conclusion.

We ask the Court to reverse the decision below and send the case back to the District Court with a direction to dismiss the bill with costs, including a recovery of those already paid by the defendant; because

(A) The original letters-patent were invalid for anticipation, in view of the construction placed on them by the plaintiff; and in any event for the want of invention in view of the prior art.

(B) The reissued letters-patent are invalid, because the plaintiff had nothing to surrender; the delay of nine years and over was too great; the expansion was illegal; the plaintiff was estopped, as against this defendant, to assert that his patent covered a collapsible structure.

(C) The defendant did not infringe; the letters-patent being for an improvement only and restricted to a rigid structure, while defendant

makes only a collapsible one; because claim 3 was cancelled in the original prosecution of the case and could not be re-asserted; because claim 5 does not read on the defendant's structure, inasmuch as in that the diagonal kerfs all point in the same direction, and one-half of them do not point "towards the center" of the bar.

(D) No adequate proof of apportionment of profits was given, either between prior structures and the plaintiff's; or between the plaintiff's stiff structure and the collapsible one of the defendant.

CONCRETE STEEL COMPANY,
Petitioner.

By THOMAS J. JOHNSTON,
Of Counsel.

THOMAS J. JOHNSTON,
LUCIUS E. VARNEY,
EMERY, VARNEY, BLAIR & HOGUET,
Of Counsel.

APPENDIX A.

List of Cases on Patent in Suit.

Vandenburgh *v.* Concrete Steel Company. This case. Hough, J., D. C. S. D. N. Y. Not reported (Transcript, p. 134).

C. C. A. 2nd Circuit, 1st Appeal. Ward, J., 258 F. R., 143 (Transcript p. 150).

D. C. S. D. N. Y. Not reported. Knox, J. (Transcript p. 345).

C. C. A. 2nd Circuit, 2nd Appeal. Mayer, J. Not reported (Transcript, p. 398).

Vandenburgh *v.* Electric Welding Company, D. C. W. D. Pa. Orr, J. Not reported.

C. C. A. 3rd Circuit. Buffington, J., 263 F. R., 95.

Vandenburgh *v.* Truscon Steel Company, D. C. N. D. O. Westenhaver, J. Not reported. (Appendix C).

C. C. A. 6th Circuit. Knappen, J., 277 F. R., 345.

Vandenburgh *v.* United States. Court of Claims. No decision.

APPENDIX B.

Cases Involving Concrete Reinforcing.

(Robinson Sec. 78)

Hennebique Construction Co. *v.* Armored Concrete Constr. Co., 163 F. R., 300 (Appeal) 169 F. R. 287.

Ranson Concrete Co. *v.* German American Button Co., 197 F. R., 172 (Appeal) 201 F. R., 528.

Turner *v.* Moore, 198 F. R., 134 (Appeal) 211 F. R., 466.

Carter *v.* Burch Plough Works, 211 F. R., 481 (No Appeal).

Thacher *v.* Baltimore, 219 F. R., 909 (Appeal) 230 F. R., 1022.

Drum *v. Turner*, 209 F. R., 854 (Appeal) 219 F. R., 188.

Trussed Concrete Steel Co. *v.* Goldberg, no report in D. C. (Appeal) 222 F. R., 506.

Besser *v.* Merillat Culver Core Co., 266 F. R., 783 (Appeal) 243 F. R., 611.

Luten *v.* Sharp, 217 F. R., 76 (Appeal) 234 F. R., 880.

United States Column Co. *v.* Benham Column Co., 225 F. R., 55 (Appeal) 238 F. R., 200.

Turner *v.* Lauter Piano Co., 236 F. R., 252 (Appeal) 248 F. R., 930.

Turner *v.* Deere etc., Co., 238 F. R., 377 (Appeal) 249 F. R., 752.

Luten *v.* Washburn, No. D. C. report (Appeal) 253 F. R., 950.

Luten *v.* Reinforced Concrete Co., 254 F. R., 107 (Appeal) 263 F. R., 983.

Luten *v.* Allen, 254 F. R., 587 (Appeal) 263 F. R., 986.

Luten *v.* Young, 254 F. R., 591 (Appeal) 263 F. R., 986.

Luten *v.* Marsh, 254 F. R., 701 (No Appeal).

Bone *v.* Marion County (Appeal) 249 F. R., 211 (Certiorari) 251 U. S., 134.

Ferro Concrete Steel Co. *v.* Concrete Steel Co., (Appeal) 206 F. R., 666.

City of Akron *v.* Bone, no D. C. report (Appeal) 221 F. R., 944 (nullified by Bone *v.* Marion County, 251 U. S., 134).

Luten *v.* Whittier, no D. C. report (Appeal) 251 F. R., 590.

Berger Mfg. Co. *v.* Trussed Steel Concrete Co. no D. C. report (Appeal) 257 F. R., 741.

Thacher *v.* Transit Constr. Co., 228 F. R., 908 (No Appeal).

Trussed Concrete Co. *v.* Corrugated Bar Co., 214 F. R., 393 (Appeal) 222 F. R., 514.

Luten *v. Scott,* 263 F. R., 721 (No Appeal).

Condron *v.* Corrugated Bar Co., 256 F. R., 672 (Appeal) 279 F. R., 867.

Of 26 D. C. cases and 22 appeals, plaintiff succeeded in 3 cases; the weight of one of which (Bone *v.* Akron) was neutralized by certiorari in Bone *v.* Marion County.

APPENDIX C.

Opinions of Other Courts.

IN THE

DISTRICT COURT OF THE UNITED STATES,

FOR THE WESTERN DISTRICT OF PENNSYLVANIA.

GEORGE E. VANDENBURGH, vs. ELECTRIC WELDING COMPANY.	No. 127 May Term, 1917. In Equity. ORR, *J.*

The plaintiff who is the patentee and owner of reissued patent No. 14,182, dated August 15, 1916, for a "reinforcing-bar," filed his bill, against the defendant charging that the defendant has infringed plaintiff's rights under said re-issued patent and demanding an accounting. The bill is in the ordinary form. The answer set up that the patent is invalid and further that if the patent could by any means be adjudged valid, yet defendant has not and does not use the device of the patent and therefore does not infringe any of plaintiff's rights granted to him by the said patent. By stipulation filed claims one, two and three of the re-issued patent are involved.

The original patent is No. 841,741 and was issued January 22, 1907, upon an application

filed May 9, 1906. The drawings attached to the re-issued patent are the same as those attached to the original patent, except that they are upon a smaller scale. The specification of the reissued patent is for all purposes necessary for the consideration of this case, the same as the specification of the original patent. The only difference between the two patents is in the matter of the claims which for the present need not be considered.

The patent relates to the art of reinforcing concrete. It is one of an exceedingly large number in that art, many of which have been submitted to this court in other cases in which the art has received consideration. In none of these cases has there been the same evidence of prior uses or the same evidence as to th state of the art at and immediately before the time when the various patents under consideration were applied for. In the present case the evidence of the state of the art at and before the time of the application by the plaintiff for his original patent is more voluminous than in any case that has been brought hitherto before this court. The evidence in this case shows that the study of methods of reinforcing concrete has been intense and widespread for years. The object of reinforcement is to give strength in those parts of the concrete structure where strains may be expected. Building operations close to the public streets and bridges and road construction on highways and along railroads have made the general public familiar with the facts that long rods and bars, short rods and bars, rods and bars with angles or with curves

or loops, wire meshwork and meshwork of other materials are all sometimes severally used for that purpose. The calculation of stresses by constructing engineers and the introduction into the concrete mass of reinforcing members where such stress is likely to be found are matters in which the public is so largely interested that serious consideration should be given to the question of the validity of the patent, although as between the parties to the litigation the case may be disposed of because infringement is not found.

It is not necessary to give a pictorial illustration of the plaintiff's structure. It suggests the pen holder rack which for many years has been found on writing desks and which consists of a horizontal spiral coil of wire fastened to a base by means of which these separate coils are maintained in a general vertical position.

We refer now to the specification and find that the patentee sets forth the nature and object of what he calls his invention in the following language:

> "This invention relates to a reinforcing-bar particularly adapted for cement and concrete construction wherein the bar is embedded in the plastic body to be supported thereby.
>
> The invention has for an object to provide a reinforcing-bar with one or more spirally-disposed coils secured to the bar so as to provide an extended area of contact adapted to resist strain longitudinally and laterally of the bar and to form a truss within the body of concrete or other plastic

material which provides the maximum of supporting strength in the arch or surface to be formed.

Other and further objects and advantages of the invention will be hereinafter set forth, and the novel features thereof defined by the appended claims."

He emphasizes his preferred construction as being "thus providing a construction in which all lateral pull or strain of the coil is avoided, owing to the equalization thereof by the oppositely-extending coils and the tendency of the coils to move or flatten toward the face of the bar resisted". He mentions a preferred means of securing the coils to the bar by setting the coils within kerfs and holding them therein by means of integral spurs "which are forced downward upon the coils when inserted and permanently retain them in position".

It was urged at the trial that one of the special advantages of the plaintiff's construction was its collapsibility and therefore its suitability for transportation from the place of manufacture to the place of use. The structure of the patent is not collapsible. The quotations above indicate it. If the integral spurs are *forced* down upon the coils and *permanently* retain them in position there can be no collapsibility. The bar to which the coils are attached is a spacing member in its relation to the plaintiff's structure. In its relation to the concrete structure it may or may not be a reinforcing member dependent upon an engineer's determination of stress to be relieved. The reinforcing bar of the patent, however, embraces both the

helicoidal coil and the bar just referred to which may be called the spacing member. That collapsibility was not a feature of the structure of the plaintiff under the original patent is clear because the first two claims of that patent require the spiral coil to be "rigidly secured" to the bar and none of the other claims indicate a different relation between the two. In the reissued patent the first two claims of the original patent have been eliminated. It will be noticed in reading the three claims of the reissued patent which are in suit, as hereinafter quoted, that the first two require the spiral coil to be "permanently secured" to the bar, and that the third indicates it because it required the overlapping spur to retain beneath it a convolution of the coil. The three claims are as follows:

"1. A concrete reinforcing consisting of a bar having a plurality of integral spurs, and a spiral coil permanently secured thereto by having the spurs bent down on the several coils, the coils extending beyond and free of the bar at the opposite side therefrom to the securing point.

2. A concrete reinforcing consisting of a bar having integral means to secure a coil thereto, and a spiral coil permanently secured to the bar in each convolution and extended beyond and free of said bar at the opposite side therefrom to the securing point.

3. A reinforcing-bar provided upon one edge with a series of kerfs each having an

integral over-lapping spur, and a coil disposed in said kerfs, each convolution thereof being retained beneath one of said spurs".

Being satisfied that collapsibility was not a feature of the device of the first patent, the court is equally satisfied that if collapsibility may be found to be disclosed in the reissued patent, then the reissued patent was broader than the original and should not have been granted. The evidence clearly discloses that intervening rights have arisen; therefore the reissued patent must be held invalid as being broader than the original to the extent at least that there is a disclosure therein of collapsibility in the plaintiff's structure.

However, it is unnecessary to decide this case upon the question as to whether or not the plaintiff's structure is collapsible or whether it is rigid or otherwise permanent in the relations between the coil and the bar. This court is satisfied that there was no invention upon the part of the plaintiff. There is no suggestion throughout the record that the bar of the plaintiff has met any predetermined engineering demands in concrete construction. Helicoidal bars, wires, hoops and methods of attaching the same to bars for the purpose of keeping apart the several convolutions thereof are old in the art. The attachment of wire to bars or sheets of metal by overlapping spurs of kerfs is old. The patent has no novelty.

It is unnecessary to set forth with any degree of particularity the various patents and pub-

lications which have led the court to this conclusion. However, much light may be thrown upon the subject by referring to "Experimental Researches on Reinforced Concrete" by Armand Considere, translated into English and published in New York in 1903.

In the view this court has taken in this case, it is unnecessary to dwell on the subject of infringement. If by any possibility, the patent could be held valid, it is most limited in its scope. If valid and thus limited, there has been no infringement.

The bill of complaint must be dismissed at plaintiff's cost.

VANDENBURGH *v.* ELECTRIC WELDING CO.

(Circuit Court of Appeals, Third Circuit. February 19, 1920. Rehearing Denied March 29, 1920.)

No. 2479.

Before: BUFFINGTON, WOOLLEY and MORRIS, *JJ.*

BUFFINGTON, *Circuit Judge.* On January 22, 1907, there was issued to George E. Vandenburgh patent No. 841,741, for a reinforcing bar. On August 15, 1916, a reissue of said patent was granted, No. 14,182. This reissue made no change from the original, either in the specification, in the figures, or in claim 3, here in issue; but claims 1 and 2, here in issue, are new. Vandenburgh having charged the Electric Welding Company with infringing said three claims of the reissue and the court below having, on final hearing, held the claims invalid and dismissed the bill, Vandenburgh took this appeal.

(1) After argument and due consideration, we are of opinion the court below made no error in dismissing the bill. The grounds of our conclusion we now record:

The combination device, which Vandenburgh disclosed in his specification, was a particular type of attachments of coils and reinforcing bars

in concrete work. Both coils of wire and reinforcing bars to which such coils were attached were prior devices in use in that art. Taking these two familiar devices of coil and bar, Vandenburgh disclosed a new way of attaching the coil and bar for use in the concrete reinforcing art, to wit, by the use of kerf or cut in the side of the bar in which the coil was placed, and a tongue or spur overlapping the kerf, which spur, when bent down, served to hold the coil in place. This seating of the bar in the kerf cut and keeping it in place by the overlapping spur or tongue, Vandenburgh set forth in his specification as follows:

> "As a preferred means of securing the coils to the bar I have shown a series of kerfs 8 in *one face of the bar* inclined away from the center of the bar toward the opposite ends thereof, and the coils are seated within these kerfs and *held therein* by means of the integral spurs 9, *which are forced downward* upon the coils when inserted and *permanently retain them in position*"

—and embodied in his third claim as follows:

> "A reinforcing bar provided upon *one end* with a series of kerfs, each having an integral overlapping spur, and a coil disposed in said kerfs; each convolution thereof being retained beneath one of said spurs".

Now, while a kerf or cut in the edge of a bar was a common mechanical expedient, no one had used it in concrete reinforcement, until

Vandenburgh disclosed his device. But, other than a combination using a kerf, Vandenburgh disclosed nothing new in his specification. Finding his kerfed combination novel, regarding it as useful, and assuming for present purposes, as we will, that it embodied invention, there is no reason for regarding it as other than a narrow contribution to the art of a specific type of coil and bar attachment. In the nine years between its grant and the filing of this bill, Vandenburgh's patent made no impress in the art, and we give the patentee the full measure of his disclosure and the protection of his claim by limiting his field of monopoly to a reinforcing bar with a kerf and an integral overlapping spur, as embodied in his third claim.

Thus limited, such claim is not infringed by the defendant's structure. It has coils, which as we have seen, are old; it has a reinforcing bar, which is also old; and the two are attached, but the crux is: How are they attached? Are they attached by a kerf cut? Mere attachment of bar and coil were old, and Vandenburg's advance consisted, not in bar and coil attachment generally, but in the kerf and spur attachment. This form of attachment being the gist of Vandenburg's patent, it must be the test of defendant's infringement, or, in other words, does the defendant use the kerf and spur attachment of Vandenburgh's claim? In our judgment, it does not. The kerf of the claim is upon one end, which can only mean one edge of the reinforcing bar, which end or edge cut is the only form of bar and kerf cut disclosed

by Vandenburgh, and his bar is a flat bar, and the kerfs are cut diagonally into the edge of such flat bar. On the other hand, the bar of the defendant's device consists of a channel bar and there is no cut of any kind in the end or edge of either of the channel sides. On the contrary, attachment in defendant's bar is made by using the back body of the central bar of the channel and stamping a tongue out of said solid central back portion, and then winding such tongue over the coil, which does not rest in the body of the bar but outside of it.

It will thus be seen the defendant's coil is not restrained by the body of the bar, or by the side of any cut in the body of the bar, but is restrained wholly by the tongue, which surrounds and holds the coil. In Vandenburgh's structure, the tongue or spur simply holds the coil in the kerf recess, and it is the cut sides of the kerf which hold the coil in place. If Vandenburgh's spur or tongue broke, the kerf sides would still have a coil-restraining function. But in defendant's device the sides of the cut in the body structure do not retain or hold the coil; that is the function of the stamped out, coil-encircling tongue. If defendant's tongue broke, there would be absolutely no coil and bar attachment or restraint, for the cut in the bar has no functional purpose whatever, save to create a tongue, and the attaching, functional agency of defendant's tongue would be the same if no cut in the reinforcing bar were made but the tongue was made by riveting it on the reinforcing bar. For these reasons we are clear

defendant's structure does not infringe the third claim.

(2) Seeing, then, that the kerf and overlapping spur in combination constituted the real invention of Vandenburgh, and that he disclosed no other form of attachment, it is quite evident he was not entitled to broad claims of the generic type, which he secured on the reissue in claims 1 and 2. Kerf and overlapping spurs are not embodied in these claims, and it is manifest that these claims, unrestricted by the limitation of kerfs and spur, were only added 9 years after his patent was granted, to make infringers of those who used other forms of attachment than the kerf and overlapping spur, which alone Vandenburgh disclosed, and which were the sole warrant for the grant of his patent.

Such being the case, it is clear the court below was not in error in dismissing the bill.

IN THE

DISTRICT COURT OF THE UNITED STATES,

NORTHERN DISTRICT OF OHIO—EASTERN DIVISION.

GEORGE E. VANDENBURGH, Complainant, vs. TRUSCON STEEL COMPANY, Defendant.	In Equity. No. 500.

WESTENHAVER, *District Judge.*

Plaintiff's bill is in the usual form, charging infringement by defendant of United States Re-issue Letters Patent No. 14,182 granted to him August 15, 1916, being a re-issue of letters Patent No. 841,471, granted January 22, 1907. The subject of the patent is for a reinforcing bar to be used in concrete construction. On this hearing, claims 1 and 3 only are in issue and relied on. The defenses are invalidity for lack of invention, and non-infringement.

This re-issue patent has been the subject of previous litigation in the Second and Third Circuits. Circuit Judge Hough, May 13th, 1918, held, in effect, that claims 1 and 2 of the re-issue patent are invalid if the change made therein from the words "rigidly secured" of the original

patent, to "permanently secured" of the reissue claims embody a different meaning than the original; that claim 3 was not infringed by a construction substantially, if not exactly similar to the construction here involved; and, finally, that the only invention disclosed by the specifications is the exact construction described and pictured in Figs. 1 and 6. On appeal, the Circuit Court of Appeals of the Second Circuit held that claims 1 and 2 of the reissue were invalid as too broad, and, in effect, that claim 3 was valid and infringed. The opinion is brief and contains no review of the prior art. It seems to assume that Judge Hough has disposed of the controversy below on the ground only of non-infringement; and seems to assume rather than to attempt to demonstrate that the feature found to be novel as disclosed by the specifications and covered by claim 3 was, in view of the prior art, patentably novel.

In the Third Circuit, District Judge Orr, December 6, 1918, also held that claims 1 and 2 were invalid because too broad, as stated in the opinion of the Court of Appeals, Second Circuit, and also held that claim 3, in view of the prior art, was invalid for lack of invention. On appeal, the Circuit Court of Appeals agreed that claims 1 and 2 were invalid because too broad, but, assuming the validity of claim 3, held that, being limited, as it must, in view of the prior art, to the specific construction therein disclosed and claimed, was not infringed by a construction somewhat different from the construction here involved. We do not understand

this opinion as deciding that claim 3 was valid.

On the hearing before me, the controversy was directed almost entirely to the validity of claim 3, although claim 1 was likewise in issue and relied on. In view of the attitude thus assumed by plaintiff's counsel, and the further fact that all the judges who have heretofore considered and passed on claims 1 and 2 have held them to be invalid because too broad, I shall adopt that conclusion without further statement of my reasons than to say that I fully agree both in the conclusion reached and in the reasons given to support it.

Plaintiff's invention is described in his patent as being a reinforcing bar particularly adapted for cement and concrete construction wherein the bar is embedded in the plastic body to be supported thereby. Fig. 6 discloses an adaptation of this reinforcing bar for column or pillar construction, but no contention is made that this is infringed by defendant. Fig. 4, plaintiff contends, also discloses an adaptation of this reinforcing bar for column construction, and that this is also infringed. This contention is disputed, defendant insisting that Fig. 4 is a detail only of a simple and inexpensive form of the beam construction disclosed in Fig. 1. Assuming without admitting plaintiff's contention to be true, Fig. 4 shows merely a bar with a spiral coil attached to the bar at each convolution by a kerf inclined at an angle to the edge of the bar in such a way as to produce an overlapping integral spur, with this spur hammered down so as to hold rigidly this spiral. Defendant

makes and sells a collapsible spiral used in strengthening concrete columns or pillars. It consists of a cylindrical spiral of steel wire usually fitted to two bars or spacers, with each convolution of the spiral engaging the spacers at regular intervals. The engagement is so loose fitting that this construction, which is normally stove-pipe-shaped, can be made flat for shipment by moving the metal rods or spacers longitudinally in opposite directions. The method whereby the spiral is attached to the spacer bar is a rectangular notch in the bar, with one or both corners peened or hammered down so as to retain and hold loosely the spiral. Fig. 4 and claim 3 of plaintiff's patent, it is contended, embody and cover this construction; hence the charge of infringement.

The differences in the method of attaching the spiral to the bar, the result accomplished, and the special collapsible mode of operation, between defendant's and plaintiff's construction are such that were I to adopt the limited and narrow construction given to claim 3 by the Third Circuit Court of Appeals, I might likewise dispose of this controversy by holding plaintiff's patent not to be infringed. The inclined kerf method of attachment, with an integral overlapping spur holding the spiral rigidly to the reinforcing bar or spacer, is not the exact method of attachment used by defendant. The kerfs or plaintiff's patent are required to be cut at an inclined angle to the edge of the bar, thereby creating an integral overlapping spur. This kerf and spur when hammered down, the disclosures of the patent show, were

intended to and do hold the spiral rigidly or permanently in place. Defendant's spacing bars have merely a rectangular notch cut at right angles in the spacing bar, and when one or both corners are hammered down, the spiral is not held rigidly or permanently in place, but so loosely as to permit of collapsing. These differences in construction are as substantial as those held not to infringe by the Third Circuit Court of Appeals. This, however, seems to me to be too narrow a ground upon which to dispose of this controversy. It seems to me that if plaintiff's patent is valid because novel and useful in a patentable sense, the charge of infringement could not be repelled by such an insubstantial difference in the method of attachment; particularly as plaintiff's patent suggests this method merely as a preferred method. I have therefore given careful consideration to the charge of infringement.

My conclusion is that if Fig. 4 and claim 3 disclose and cover a concrete reinforcement for columns and pillars of the character now claimed by plaintiff and as is constructed and used by defendant and others, the claim must be held void for want of patentable novelty. My reasons for this conclusion may be briefly stated.

Plaintiff's original application was filed May 8, 1906, and this must be taken as the date of his invention. True, on this hearing he offered some testimony which is not sufficient, in my opinion, according to well settled rules, to establish an earlier date. The concrete reinforcement art for columns and pillars was at this

date quite well developed, although it had not come into such general and extensive use as it now enjoys. This art had been described in standard technical treatises and disclosed in numerous patents and practical constructions. Armand Considere, a French engineer, in a standard work, translated and published in New York, in 1903, teaches all that can now be claimed by plaintiff for his patent or that is now done by the defendant in the matter of buildings and reinforcing concrete columns, except perhaps the kerf and spur method of attaching the spiral to the spacing or reinforcing bar or bars. This is, in fact, admitted by plaintiff. Hoops, circular bands, and continuous spirals attached to spacing or reinforcing bars as a method of concrete reinforcement for columns or pillars is also disclosed by numerous patents. See Hyatt British Patent No. 1715, 1874, Pelegren French Patent No. 323,457, 1902, Considere United States Patent No. 752,523, 1904, Kieserling & Moller German Patent No. 73004, 1892. Similar constructions are also described and illustrated by Christophe in an article published in 1902, by Marquess in an article published in the Engineering News of New York in 1904, and also in other articles and illustrations in the Engineering News of March 8, 1906, and June 15, 1905.

In some the method of attaching the spiral to the bar is also disclosed. Kieserling & Moller, above noted, discloses a notch in the outer edge of the spacing bar designed to contain and hold the coils. Cummings, U. S. Letters Patent No.

822,587, application dated January 6, 1905, patent date June 6, 1906, shows circular, but not spiral, reinforcing bands for a concrete column attached to the spacer bars by tongues stamped out and then pressed and hammered down over the bands. Christophe, in the article above referred to, discloses notches on the exterior faces of the spacing bars to contain and hold the spiral.

In the metal working arts, numerous patents disclose kerfs or notches, including inclined kerfs with overlapping spurs, as a means of attaching coils or spirals to bars. See the following U. S. Letters Patent: Norwood, No. 571,575, 1896; Clark, No. 589,593, 1897; Carson, No. 278,282; McCall, No. 657,827; Caldwell, No. 682,386, 1901; Prescott & Bennett, No. 447,162, 1891, and Eason, No. 723,632, 1903. Of these patents, Norwood and Eason disclose the inclined kerf with the overlapping integral spur, and Prescott & Bennett discloses a rectangular notch or kerf cut at right angles to the edge of the bar with the corners hammered down in the manner of defendant's construction.

Thus it appears that all the elements, both of claim 3 of plaintiff's patent and of defendant's construction, are old. Plaintiff's counsel, as already said, admits this to be true, but contends that the reinforced concrete art does not show the kerf and spur in a combination with reinforcing or spacer bar or bars and a continuous spiral, and that this novelty is of a patentable character. This claim of novelty is not true in view of Kieserling & Moller and Christophe's disclosure unless plaintiff's kerf

is to be limited to a kerf inclined at such an angle to the edge of the spacer bar as to create and form an integral overlapping spur. It is the latter method only of attachment which is not plainly shown in the prior art. The numerous examples of hoops, circular bands, and continuous spirals in combination with spacing or reinforcing bars found in the concrete art do not explicitly call for an inclined kerf and integral overlapping spur method of attachment. Notches in which to seat and hold the spiral are, however, called for and disclosed. Doubtless, engineers like Considere, Christophe, and Marquess, as well as numerous inventors, assume that any reasonably skilled mechanic or engineer would know the means used and available in the metal working art to accomplish this result, and regarded it as unnecessary to make further disclosures or to give more specific directions. Plaintiff's contention, however, now is that any kind of kerf or notch is covered by his patent, and this claim comes in conflict literally with the existing prior art.

Furthermore, invention cannot, in my opinion, be based on the adaptation of the familiar inclined kerf with an integral overlapping spur of the metal working art to its assumed new use in the concrete reinforcing art. Let it once be assumed, as plaintiff's counsel concedes, that the concrete reinforcing art teaches that the proper method of reinforcing a concrete column or pillar is to use hoops or circular bands, or continuous spirals, spaced at regular intervals around spacer or reinforcing bars and attached

hereto, then the problem of making this attachment becomes no longer one peculiar to the concrete reinforcing art but belongs to the metal working art. The problem is one of the metal worker, and not of the concrete engineer. For this reason, all the means known to the latter art or used by workers therein, must be regarded as the common posession of all persons skilled in either art, and invention cannot be predicated upon a transfer of a device familiar in one to a like use in the other; particularly is this true when no new principle of operation, and no new function is accomplished or performed as a result of the transfer to the new combination.

That invention is not present under these conditions, and does not result from such an adaptation of an old device, is well settled by numerous decisions. See: *Huebner-Toledo Breweries Co.* vs. *Mathews Gravity Carrier Co.* (6 C. C. A.) 253 Fed., 435; *Berger Mfg. Co.* vs. *Trussed Concrete Steel Co.* (6 C. C. A.) 257 Fed., 741; *Van Dorn Iron Works Co.* vs. *Mathis Bros. Co.* (6 C. C. A.) 260 Fed., 400, 405-6. The language of Judge Warrington in the case first cited, is equally applicable. here. "It must, of course, be conceded that patentable novelty may exist in a combination of old elements; but here the combination claims in suit are lacking in the usual and essential tests of invention. No new function of elements or new method of operation is evolved, and the result achieved is exactly the same as the old one. The settled rule under such facts is that to adapt

an old and familiar device to another structure equally old and well known is not to exercise the inventive faculty; it is to apply the skill of the mechanic".

Plaintiff made his alleged invention in an art already crowded and highly developed. The evidence shows that commercially he has contributed nothing whatever to the progress of reinforced concrete construction. No buildings or column were ever constructed by any one under his patent prior to 1916. Two licenses only have been issued by him, the first in the latter part of 1916, under which no business appears to have been done except perhaps to put up one structure, and the other followed the favorable decision in the Second Circuit. Claim 3 of his patent consequently is only another example of that class of patents described by Mr. Justice Bradley in *Atlantic Works* vs. *Brady*, 107 U. S., 192, (and recently approved and re-announced by Mr. Justice Clarke in *Elyria Iron & Steel Co.* vs. *Railway Supply Co.*, 242 U. S., 609, in these words: "The process of development in manufactures creates a constant demand for new appliances, which the skill of ordinary head workmen and engineers is generally adequate to devise, and which, indeed, are the natural and proper outgrowth of such development. Each step forward prepares the way for the next, and each is usually taken by spontaneous trials and attempts in a hundred different places. To grant to a single party a monopoly of every slight advance made, except where the exercise of invention, somewhat above ordinary mechanical or engineering skill,

is distinctly shown, is unjust in principle and injurious in its consequence"). See also: *Railroad Supply Co.* vs. *Elyria Iron & Steel Co.* 244 U. S., 285; *Package Mach. Co.* vs. *Johnston Automatic Sealer Co.* (6 C. C. A.) 246 Fed., 598, 601; *A. Schrader's Son, Inc.* vs. *Dill Mfg. Co.* (6 C. C. A.) 262 Fed., 504.

This conclusion is reached on the assumption that plaintiff's patent and claim 3 discloses what is claimed to be his invention. Personally, however, I agree also with Judge Hough's conclusion that plaintiff's invention was not what he now claims and that what is now claimed is not thereby disclosed, but the only invention disclosed by his specifications and claims is the exact construction described and pictured in Figs. 1 and 6, as to which no charge of infringement is made.

For these reasons plaintiff's bill will be dismissed at his costs.

D. C. WESTENHAVER,
Judge.

Cleveland, Ohio,
September 23, 1920.

UNITED STATES CIRCUIT COURT OF APPEALS,

SIXTH CIRCUIT.

Before: KNAPPEN, DENISON and DONAHUE, *Circuit Judges*:

KNAPPEN, *Circuit Judge*: Suit for infringement of claims 1 and 3 of reissued patent No. 14, 182 (August 15, 1916) to Vandenburgh. The original patent, No. 841,741, was issued January 22, 1907. The application for reissue was filed July 1, 1916. The invention relates generally to reeinforced concrete construction. Its prominently-stated specific object is to "provide a reinforcing bar with one or more spirally-disposed coils secured to the bar so as to provide an extended area of contact adapted to resist strain longitudinally and laterally on the bar, and to form a truss within the body of concrete, etc". As a preferred means of securing the coils to the bar the specification discloses "a series of kerfs in one face of the bar inclined away from the center of the bar toward the opposite ends thereof", the coils being "seated within these kerfs and held therein by means of the integral spurs, which are forced downward upon the coils when inserted and permanently retain them in position." The specifications, considered in connection with the drawings, plainly show an integral spur overlapping

the kerf, which when forced downward upon the coils holds them rigidly in position. Claims 1 and 3 read as follows:

> "1. A concrete reinforcing consisting of a bar having a plurality of integral spurs, and a spiral coil permanently secured thereto by having the spurs bent down on the several coils, the coils extending beyond and free of the bar at the opposite side therefrom to the securing point".
>
> "3. A reinforcing bar provided upon one edge with a series of kerfs each having an integral overlapping spur, and a coil disposed in said kerfs, each convolution thereof being retained beneath one of said spurs".

The defenses are invalidity of the reissue, lack of invention and noninfringement. The district court held claim 1 invalid as too broad, and claim 3 void for lack of patentabie novelty, if construed broadly enough to embrace defendant's structure. The appeal is from a decree dismissing the bill.

The district court was plainly right in holding claim 1 invalid. As will later appear, the only novelty in plaintiff's conception is in the specific method of attaching the coils to the bar by kerfs therein and integral spurs rigidly securing the coils within the kerfs. The claims of the original patent, which were replaced by claims 1 and 2 of the reissue, in terms call for a rigid fastening. The omission of the requirement of rigidity in claims 1 and 2 was apparently intended to cover the feature of collapsibility found in later devices. Claim 1 of the reissue

is thus unwarrantably broad. The same conclusion has been reached by the Circuit Court of Appeals of both the second[1] and third[2] circuits. Claims 3 of the reissue differs from the third claim of the original patent only in the substitution in the reissue of the word "edge" for the word "end" in the original. This is plainly merely a correction of a clerical error. It thus becomes unnecessary to give further consideration to the question of the validity of the reissue.

The real date of plaintiff's invention is more or less material in determining what is prior art as related to invention. Plaintiff's original application was filed May 9, 1906. He attempted to carry the actual date of his invention back to 1903, and offered some testimony tending to show such earlier invention date. The trial judge held the testimony not sufficient to establish such earlier date. We cannot disturb this conclusion. The evidence consisted solely of the oral testimony of plaintiff and another witness, taken in open court. Under well-settled rules, the burden rested heavily upon plaintiff to establish the fact of the asserted earlier date of invention to the satisfaction of the court,—whether or not such satisfaction is required to be beyond a reasonable doubt. *St. Paul Plow Works* v. *Starling*, 140 U. S., 184, 198; *Clark Co.* v. *Willimantic Co. ibid.* 481, 492; *Moline* v. *Rock Island* (C. C. A., 7), 212 Fed., 727, 732; *Barber* v. *Otis* (C. C. A., 2), 271 Fed.,

1 *Vandenburgh* v. *Concrete Steel Co.*, 258 Fed., 143.
2 *Vandenburgh* v. *Electric Welding Co.*, 263 Fed., 95.

171, 180. The question presented was one of fact only, depending upon the weight to be given this oral testimony; and the trial court's conclusion thereon must be accepted here unless the evidence decidedly preponderates against it. *Pugh* v. *Snodgrass* (C. C. A., 6), 209 Fed., 325. Assuming that we are at liberty, upon this record,[3] to consider this testimony, it is enough to say that the evidence does not preponderate against the conclusion of the trial judge.

Turning to claim 3: The art of steel-reinforced concrete construction generally was highly developed before Vandenburgh entered the field. It had been applied not only to the construction of bridges, spandrel walls, dock walls, retaining walls and fireproof floor construction, but specifically to beam, girder and column construction in manufacturing and other buildings.[4] The art, generally speaking, was already old and crowded, although the more extensive and rapid use of metal-reinforced concrete came a little later. Truss reinforcement of concrete beams was also old, through the use of radially disposed projections from the tension member (either perpendicularly or obliquely thereto), as well as otherwise. See: *Trussed Concrete Steel C.* v. *Goldberg* (C. C. A., 6), 222 Fed., 506, 509 *et seq.* The art with which we are here

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[3] The testimony is not certified as settled and approved by the trial judge, as required by General Equity Rule 75 (b). It appears to have been merely stipulated by counsel.

[4] We may refer in this connection to the following decisions of this court: *Ferro Concrete Steel Co.* v. *Concrete Steel Co.*, 206 Fed., 666; *City of Akron* v. *Bone*, 221 Fed., 944; *Detroit Iron & Steel Co.* v. *Carey*, 236 Fed., 924; *Luten* v. *Whittier*, 251 Fed., 590.

concerned relates to that form of column construction called "column hooping". While Vandenburgh's invention seems more specially adapted to beam and girder construction, it is declared by the specification to be applicable to column construction as well; and we shall treat the disclosure not only as so applicable, but as intended to cover a plurality of vertical reinforcing or spacing members around and upon which steel reinforcement is wound in spiral form. Vandenburgh was not a pioneer in this field. Hyatt (by British patent, 1874), and Lee (also by British patent, in 1885) had disclosed iron bands looped spirally to reinforcing members, the spirals being riveted to each other or to the vertical reinforcement. Kieserling (German patent, 1894) had disclosed columnar reinforcement by way of a series of loops attached to vertical members by square notches therein. Column hooping seems to have become active abroad about the year 1902, and in the United States about a year later; and in articles published in 1902 and 1904 column hooping was described and illustrated, the 1902 publication disclosing notches on the exterior faces of the supporting members to contain and hold the spirals. Considere (United States patent, 1904) disclosed a reinforcement consisting of longitudinal rods and "independent helicoidal coils of metal * * * surrounding the core and rods," the coils apparently not being attached to the longitudinal members; and the next year published his researches in connection with the use of "continuous helicoidal spirals." In March, 1906, the *Engineer News* published an

illustrated description of metal reinforcement for columns, showing spiral reinforcement retained in place upon the vertical members between projections from the surface thereof.

It is thus apparent that Vandenburgh's invention, at the best, consisted only in the method of attaching the spiral loop to the vertical or spacing member. As already said, his method of attachment was by means of a kerf cut at an angle inclined to the edge of the vertical or spacing member, which thereby created an overhanging spur integral with the upright, the hammering down of this kerf and spur making a rigid connection between the spiral and the upright. It is true that this particular method of attaching the loop to the upright was new as applied to the art of metal-reinforced concrete. But, as already shown, continuous spirals in connection with spacer bars were old in that art. It was old in metal construction generally to use that method of fastening wires to uprights, as shown by Norwood (patent 1896) in the connection of longitudinal parallel wires with the cross-bars of sand-screens, where "diagonal slots forming acute-angle hooks" receive the wires, the hooks being "bent down to hold such wires in place." The same method has been disclosed for the fastening of fence wires to posts of cement construction, the attachment of course not being directly to the cement. We recognize that the use of diagonal kerf and overhanging spur method of connection in a non-analogous art did not anticipate the combination claim in question; but we are not considering anticipation, but invention, and the prior art

in question is thus not irrelevant. *Day* v. *Mountain City Mill Co.* (C. C. A., 6), 264 Fed., 963, 964-5. The adaptation of an inclined kerf and overhanging spur connection to the reinforced concrete art amounted only to a common mechanical expedient. *Berger Mfg. Co.* v. *Trussed Steel Concrete Co.* (C. C. A., 6), 257 Fed., 741.

The defendant does not use the diagonal kerf and overhanging spur. Its coil is located in a rectangular cut in the edge of the upright, there being thus no overhanging spur, and the coil is held in position by hammering or "peening" down the metal at the edges of the rectangular cut sufficiently to hold the coil in position, not rigidly but loosely enough to permit the collapsing of the structure for purposes of shipment. Defendant's method of fastening was also old in the metal construction art, being shown in Prescott & Bennett's 1891 sand-screen patent. The patent in suit has been considered by the Circuit Court of Appeals of the Second and third circuits. In the former (*Vandenburgh* v. *Concrete Steel Co., supra*) claim 3 was held to disclose invention and to be infringed by a construction which seems to be substantially similar to that involved here. In the Third Circuit (*Vandenburgh* v. *Electric Welding Co., supra*) claim 3 was held limited by the prior art to a bar with kerfs in which the attached coil is placed, and a tongue or spur overlapping the kerf and holding the coil in place, and as so limited not infringed by a fastening consisting of a lip or clip struck up from the face of the spacing member.

We are not impressed that the advance in reinforced concrete construction is due in any substantial measure to Vandenburgh's contribution. Our conclusion is that, assuming for the purposes of this opinion that the claim in question involves some measure of invention, it is so narrow as to be practically limited to the specific method of fastening disclosed, and that it cannot be extended to cover defendant's method.

The decree of the district court is accordingly affirmed.

APPENDIX D.

Plaintiff has taken his stand boldly upon the proposition that *all* of the profits which the defendant made from the sales of the alleged infringing structure were due to the patent in suit, and that therefore he was under no duty to apportion or to attempt to apportion between the sale of ironwork for reinforcement of concrete columns made in other ways than by the description of the patent, and that made by the patent formula, on the one hand; nor on the other hand, between column reinforcement made by the formula of the patent, which could not be collapsed, and that which was made like the defendant's structure, which could be collapsed, and was different in that respect. Having thus conceived the case, he has given no evidence on any other theory; and has, as the Master said, made "no attempt" to apportion on either branch of the case. In defendant's opinion, he has therefore failed to prove his case.

This failure is not due to any inherent impossibility, either as to the first class of apportionment, or as to the second. In the evidence in the case, other structures have been shown; and certainly those involved in the cases in the Third Circuit and in the Sixth Circuit have been placed upon the market. At the time of the proceedings before the Master, the structure of the Electric Welding Company in the Third Circuit, an example of which we have before the Court, had been extensively exploited and a

model of it was offered in evidence. No evidence was given of any superiority in construction or saving in cost of the plaintiff's structure over that in the Third Circuit; which, like the defendant's structure, embraced collapsibility; nor was any evidence given concerning the part which collapsibility played in the sales of that structure, save only that its maker, Mr. Cummings, Transcript, page 27, Q. 18, testified that it was a commercial advantage to be able to collapse the structure of his manufacture.

In this situation, therefore, unless the plaintiff can hold the defendant for all of its profits, it is clear that he can recover only nominal damages, and there can be no middle ground.

We think it was clearly his duty to apportion in the way pointed out in *Westinghouse* v. *Wagner*, from which we quote presently.

In the meantime, however, the situation here is not what it was in the *Westinghouse* case. In that case, this Court had not already spoken; and the views which were subsequently expressed, which led to an entire reorganization of the plan of conducting patent accountings, were not available as a guide. For that reason, counsel, not having followed this Court's idea of a proper method, had not given evidence upon which a proper apportionment could be made by the Master. Therefore this Court sent the case back for such evidence. It dragged its slow way along before the Master, Henry H. Denison, who has since become a Circuit Judge in the Sixth Circuit; then before the District Court, which set aside the Master's findings, as it had done before; and quite recently, some two

years after the argument, has again been decided by the Circuit Court of Appeals for the Eighth Circuit, which upset the District Court and affirmed the Master.

None of these difficulties was present in the instant case. *Westinghouse* v. *Wagner* was decided ten years ago. It was thoroughly known to the profession; the rules which it prescribes should have been fully considered and followed in the trial of this case before the Master. Nothing of that was done; if this Court now finds that the case was erroneously decided, upon principles which it has already set out in that leading case, no duty exists to send the case back for further trial, but the reversal must be "on the record in the court below," for good or for bad. It was principally because no previous rulings had been made on this second kind of apportionment (which should have been made in the present case) that the court sent the *Westinghouse case* back; that is, apportionment between the rigid "truss-like structure within the body of concrete" of the plaintiff, which had never been sold and for which there was no demand; and the collapsible structure of the defendant, which has been extensively sold, both in the form in which the defendant makes it and in other forms, as set out in the Third and Sixth Circuits.

We will explain fully the difference between these forms from the working examples present in court; but in order that the explanation shall be in the brief, if the Court shall find it desirable to refer to it, we here state it.

The only form of *column hooping* which the plaintiff sets out in his patent is that shown in Figure 6. It will be noted that the column hooping in that figure, as in Figure 4 and Figure 1 and Figure 3, is "free of the bar" on one side; that is, the helix passes through the slots in the bar on *one side only,* and even in Figure 6, where two different sets of coils are used, four coils in all, none of them is attached to both of the bars. That is because the plaintiff's idea was that one bar would hold the coils, they being so arranged as to be in tension on opposite sides of the center, and so the strains would be balanced and the structure would be stiff, or "rigid".

Defendant's idea was not that. Its helix is continuous in one direction and is attached to one of the bars loosely, upon one side; but a second spacer is also included, and the helix is attached loosely *to that one also,* so that relative longitudinal movement of the two spacers collapses the structure into a flat bundle. When it is put in place in the mold in which the concrete is to be poured, the second spacer is spaced 180° around the cylinder, and holds up the opposite side of the coils. Under some circumstances, additional spacing bars are also used; but obviously if, for example, there be four, two of them may be placed side by side on each side of the coil and it will still be entirely collapsible. When placed in the mold, the spacers may be adjusted to 90 degrees apart. This structure of the defendant, whether used with two or more spacers, is held in position by them while the concrete is being tamped;

the opposite side of the coil is *not* "free of the bar".

The difference is radical. In the one case, plaintiff's structure, if erected in the mold, would have the one side "free of the bar," and could readily be deformed when the concrete is tamped by the heavy ram, so that the strains would not be properly distributed. Having only one spacer, there is no support for the side which is "free of the bar".

On the other hand, the defendant's structure is properly supported at as many points as may be desired. We do not understand how the Circuit Court of Appeals could say that this made no change in the "structure, *qua* structure," Transcript, page 402. The whole mode of operation of the defendant's structure is radically unlike that of the plaintiff. It never at any time purports to be "rigid"; when the spacers are assembled upon it on opposite sides it is as completely collapsible as any coil of wire; yet when placed in the mold, the coils are held in their proper relation so as to support the bursting strain upon the column, as good engineering requires. In the plaintiff's structure one side of the coil being left "free" of any spacer which distributes it properly with reference to strains, there may be open spaces between the coils very much greater than is intended, rendering the column liable to deformation.

THERE IS NO EVIDENCE BEFORE THE COURT AND THERE HAS BEEN NONE AT ANY TIME WHICH SHOWED THAT THE RIGID STRUCTURE WAS SALABLE, AT ANY PRICE, OR ON ANY TERMS.

It is not a case where a defendant has come into a market *which the plaintiff already possessed,* and by making some change in the structure has sought to evade infringement. It is a case in which the plaintiff *never had any market,* and has made no attempt to show that he had. It is a case in which the defendant knew nothing of the plaintiff or of his patent, derived no information from the patent itself or from any structure made under it, but independently devised the thing which it got up, as is stipulated in this case, "without any knowledge of plaintiff's patent or of plaintiff's alleged invention" (Transcript, page 133, folio 398). How then can the Court say that this is a case where the "sale of the article would be impossible without availing of the disclosure of the patent"; as Judge Mayer expresses it, page 402 of the Transcript? "The disclosure of the patent" has never been sold anywhere, by anybody. The lower courts and the Master speak as if defendant had raided the plaintiff's market, and imitated a structure already extensively in use, thus depriving the plaintiff of his advantage; but clearly that is not the situation at all. The entire evidence concerning the exploitation by the plaintiff is found in the deposition of Mr. Griffin, his counsel, page 166 of the Transcript:—

> "I am the only person who has full knowledge of such licenses. I further state that *only one* such license was granted during the time covered by this accounting and it was to the Concrete Steel Products Com-

> pany • • • They had paid for something less than one hundred tons of spirals made in accordance with the invention of the patent in suit. This is the only license of any kind which was granted on or subsequent to the date of reissue of the patent in suit and to and including the date of the filing of the injunction in this case, or the date of the filing of the account."

No description of the trivial manufacture referred to is given; the conclusion that it was like the patent in suit is only that of counsel. That is the extent of the evidence on the subject..

Defendant's structure had long been on the market before *plaintiff was heard of* or his patent was reissued; as the correspondence in Exhibit D (page 125 of the Record) shows, nothing had been done with plaintiff's paper patent except to attempt to drive the trade to taking licenses by such tactics as asserting that structures in use in office buildings built long before were infringements and having the makers of them obtain licenses rather than take a chance on a patent litigation which would cost more, in any event, than the license itself. That sort of tactics will not show utility or be of much avail in this court.

Westinghouse v. Wagner.

The provision of that case under which we believe this one to fall is as follows:

> "(d) But there are many cases in which the plaintiff's patent is only a part of the

machine and creates only a part of the profits. His invention may have been used in combination with *valuable improvements* made, or other patents appropriated by the infringer, and each may have jointly, but unequally, contributed to the profits. In such case, if plaintiff's patent only created a part of the profits, he is only entitled to recover that part of the net gains. He must therefore 'give evidence tending to separate or apportion the defendant's profits and the patentee's damages between the patented feature, and the unpatented features, and such evidence must be reliable and tangible, and not conjectural or speculative; or he must show, by equally reliable and satisfactory evidence, that the profits and damages are to be calculated on the whole machine, for the reason that the entire value of the whole machine, *as a marketable article,* is properly and legally attributable to the patented feature'. *Garretson* v. *Clark,* 111 U. S., 121, 28 L. ed. 371, 4 Sup. Ct. Rep. 291."

Apparently what has misled the Master and the Court below is the fact that the plaintiff *could point to no part of his patent which was new.* The spacing bar was, as we have shown when treating of validity, very old; the helix was equally old; both being shown in the Hyatt patent of 1874, for example, and in better form in the Kieserling German patent of 1892, pages 106 and 107 of the Transcript. The particular form of attachment was old, being shown in minute detail (and indeed very much better than the plaintiff shows it) in the Norwood patent, page 59 of the Transcript. Plaintiff thus

being unable to point to any particular thing which was original with himself, the Master and the courts seem to have reached the conclusion that *therefore* he was entitled to the profits upon the whole structure! We think this is a complete *non constat,* and in the face of the fact that no attempt was made to show any commercial demand for the thing which he actually made, it seems clear that there is no basis for a holding that *any* part of the profits was due to the patent in suit.

Indeed, this would be the conclusion if there had been some novelty in the device itself; because this Court held (*Black* v. *Thorne,* 111 U. S., 121):

> "It does not always follow that because a party may have made an improvement in a machine and obtained a patent for it, another using the improvement and infringing upon a patentee's right will be mulcted in more than nominal damages for the infringement."

This would be to make us pay for "a mere adoption of a well known item of general information" as Judge Manton expresses it in

> *Victor Talking Machine Co.* v. *Star Piano Co.,* 263 F. R., 85.

This Court said in

> *Garretson* v. *Clark,* 111 U. S., 121

that profits and damages are to be calculated on the whole machine when "the entire value

of the whole machine, as a *marketable article*, is properly and legally attributable to the patented feature."

But the course taken by the Court below leads to this curious result; that when there is no "patented feature," but all the features are old and only the combination of them in the patented structure is new, then *Garretson* v. *Clark* does not apply; and there is no way of apportioning profits between what was old in the art and the new combination, but in every such case the entire profit from the sale of the new combination must be attributed to the patent in suit! Yet it is our belief that *Black* v. *Thorne* was intended to apply to just that situation, and where it is impossible to attribute the sales to any particular feature, only the clearest evidence would justify giving all the profits to the plaintiff, and that the defendant should *not* be "mulcted" under such circumstances. This case clearly comes within the leading decision of this Court in

Dobson v. *Hartford Carpet Co.*, 114 U. S., 439

which was followed in another case upon the same patent

Dobson v. *Dornan*, 118 U. S., 10.

The first case is reported below in 10 F. R., 385. The curious part of the decision below in the first case was that the Court took as the standard of profits of the defendant the profit which

the plaintiff made upon the sale of the same article. Of course, that resulted in entire confusion between the question of profits and that of damages, and this Court might have set aside the decision below upon that ground alone. But as in *Westinghouse* v. *Wagner*, it tried to clarify the situation, so that the patent accounting would be correctly conducted thereafter, and took up for consideration the rule which should be followed, saying:—

> "Leaving out of view all questions as to the presumption that the plaintiffs would have made and sold, in addition to the carpets of the patented design which they did make and sell, the infringing carpets which defendant made and sold * * * it is plain that the price per yard allowed as damages was the entire profit to the plaintiffs, per yard, in the manufacture and sale of carpets of the patent design, and *not merely the value which the design contributed* to the carpets. There was no evidence as to that value * * * This Court has, in a series of decisions, laid down rules as to what are to be regarded as 'profits to be accounted for by the defendant' and what as 'actual damages', in suits for the infringement of patents; and no rule has been sanctioned which will allow in the case of a patent for a design * * * the entire profit from the manufacture and sale of the carpets as profits and damages * * * unless it is shown, by reliable evidence, that the entire profit is due to the design. * * * One having a design free to be used and the other a design protected by a patent, the latter may or may not command in the

> market a price larger than the former. If it does, then the increased price may fairly be attributed to the design; and there is a solid basis of evidence for profits or damages. But *short of this*, under the rules established by this Court, there is no such basis."

The Court did not confine this ruling, however, to design cases (as may be contended) because it said immediately afterwards:

> "The same principles are applicable as in patents for inventions. The burden is upon the plaintiff, and if he fails to give the necessary evidence, but resorts instead to inference and conjecture and speculation, he must fail for want of proof."

That is the situation here.

The same question and the same patent came before the court again in *Dobson* v. *Dornan*, and the court affirmed its previous ruling, saying:—

> "The objection is to taking the whole of that profit as a measure of damages on the assumption that the whole of it was due solely to the design."

We cite also the following cases in this Court

> *Seymour* v. *McCormick*, 57 U. S., 490;
> *Mowry* v. *Whitney*, 81 U. S., 620;
> *Gould* v. *Cowing*, 105 U. S., 255.

On the question of the materiality of the order of proof (that is, the burden of proof in general) which this Court has recognized in *West-*

inghouse v. *Wagner* as resting upon the plaintiff, we refer to

Railway Co. v. *Harris,* 247 U. S., 367

where this Court said:

> "These established principles, and our holding in *Central Vermont Railway* v. *White* (238 U. S., 507, 511, 512) we think make it clear that the question of burden of proof is *matter of substance.*"

See also

> *Seaboard Air Line Railway* v. *Horton,* 223 U. S., 492,

which is to the same effect.

The Circuit Court of Appeals was clearly wrong on the accounting.